

REPORT OF THE Navajo Epidemiology Center

September 2021

By David Foley, MSPH, Epidemiologist



Navajo Nation Hospitalization and Emergency Room Rates 2017

National Center for Health Statistics 113 Select Causes

Health care facilities operating on the Navajo Nation including Indian Health Service (IHS), 638, and private clinics provide the data in this Report. IHS compiles and stores this data in a system called the National Data Warehouse (NDW). IHS then makes this data available to Tribal Epidemiology Centers via the Epi Data Mart (EDM). The EDM consists of a collection of SAS datasets that reside on a server within the IHS and is managed by the Division of Epidemiology and Disease Prevention (DEDP) within the Office of Public Health Support. The EDM consists of the patient registration information and encounter, or health care visit, data. The patient registration information includes name, address, facility where the patient is registered, AI/AN status, tribal affiliation (or not), community of residence, date of birth, gender, etc. The patient encounters information includes things such as diagnostic, procedure, result codes and descriptions, provider notes, type of encounter (i.e. contract, hospital, outpatient, public health nurse, etc.). Facilities send this data to the NDW on a regular schedule with the majority sending monthly.

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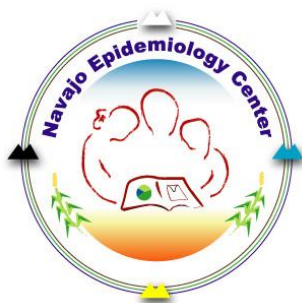
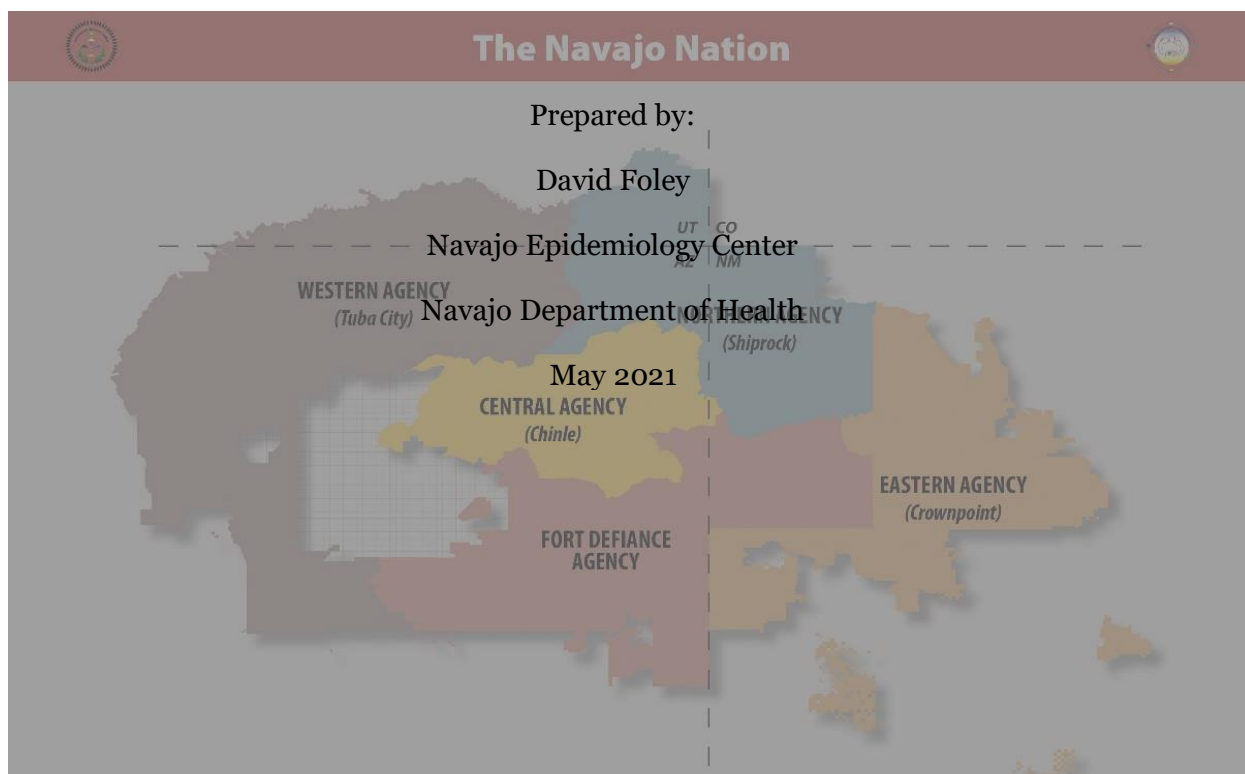
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Introduction

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This report contains diagnosis data from the EDM if the patient was treated between January 1, 2017 and December 31, 2017, inclusive. Clients are included only if they identify as being Native American, being Navajo, and having a community residence on the Navajo Nation or within a border town¹ including the 3 Navajo satellite communities (Alamo, Ramah, and Tohajiilee). This report only displays counts and rates at the Navajo Nation level and not at the Navajo Agency or Chapter level because of issues with small numbers for rare conditions.

Health conditions are organized according to the International Classification of Diseases (ICD) 10 standards, and according to the National Center of Health Statistics (NCHS) guidelines for 113 selected causes of death (http://www.cdc.gov/nchs/data/nvsr/nvsr58/nvsr58_19.pdf). The reader may refer to the appendix for these definitions. This report also includes an additional 10 infectious diseases, one condition from the Mental & Behavioral Health ICD-10 block, and 19 health conditions from the Injury, poisoning and certain other consequences of external causes block (T codes) which are of interest to the NEC. It is within the T codes that important issues such as unintentional poisoning and opioid poisoning can be found. U.S. Census data from 2000 and 2010 provide population data for each Navajo Chapter and border town. The author estimated the 2017 Navajo Nation population which was used for the denominator in rate calculations by calculating the population change between 2000 and 2010 and applying a constant rate of change for each year from 2011-2017. The 2017 estimated Navajo and border town population is then used to calculate the rates. These rates are age adjusted to the 2000 U.S. population.

The IHS Standard Code Book (SCB) helped to further stratify by the type of health care clinic where the patient was treated. A “CLINIC_CD” variable of “Emergency Medicine” indicates an Emergency Room (ER) visit case, and a “SVC_CAT_CD” variable coded as “H” indicates a Hospitalization case. Rates and counts are suppressed if there are fewer than 5

¹ Border towns include Aztec (NM), Blanding (UT), Bloomfield (NM), Bluff (UT), Cuba (NM), Farmington (NM), Flagstaff (AZ), Upper Fruitland (NM), Gallup (NM), Grants (NM), Holbrook (AZ), Joseph City (AZ), Kirtland (NM), Monticello (UT), Page (AZ), Waterflow (NM), Winslow (AZ)

cases for a health condition. Note that the rates presented do not indicate unique individuals as a person can be treated multiple times in the course of the year for the same health condition.

Charts 1-8 present leading causes of hospitalization and emergency room visits for the Navajo Nation including comparisons to the 2016 data.

For each ICD-10 block (grouping of diseases and external causes) charts are provided for emergency room and hospitalization rates for the Navajo Nation alone. Chart 48 displays additional emergency room and hospitalization rates for infectious diseases that are of particular interest to the Navajo Nation, but not included in the NCHS 113 select causes. When sufficient data are available, additional charts are included for each ICD-block displaying hospitalization data by Gender. External causes of injury by Emergency Room visit are also presented by Gender.

Tables 1-45 display count data and rates for the 113 select causes. Data is available for emergency room visits, hospitalization, and all health care visits (which may include data for something as basic as a chart review). Gender specific counts and hospitalization rates are also provided where counts are greater or equal to 5. Because this is the second year of data, comparisons can be made between 2017 and 2016 results within the Navajo Nation. Some tables have a column labeled “Movement from 2016”. An upward arrow indicates that 2017 is significantly higher (i.e. 95% Confidence Intervals do not overlap) than 2016, a downward arrow indicates that 2017 results are significantly lower than 2016, and a level arrow indicates there is no significant difference between years.

There are significant differences in hospitalization rates by gender for some health conditions. All rates provided in parenthesis are age adjusted per 10,000 people. Hospitalization rates were significantly higher for females than males for anemias (85.68 and 24.93 respectively), cholelithiasis and other disorders of the gallbladder (29.48 and 20.12), infections of the kidney (16.86 and 3.52), asthma (20.28 and 11.51), and other and unspecified infectious and parasitic diseases (110.03 and 93.69). Hospitalization rates were higher for males than females for diabetes (80.81 and 65.83 respectively), chronic ischemic heart disease (15.92 and 10.00), pneumonitis due to solids and liquids (6.36 and 2.76), alcohol liver disease (22.02 and 11.91), renal failure (51.85 and 39.90), other and unspecified non-transportation accidents (12.50 and 7.66), and assault by other (non-firearm) means (6.38 and 2.34). For some health conditions not enough data were available to make comparisons by gender.

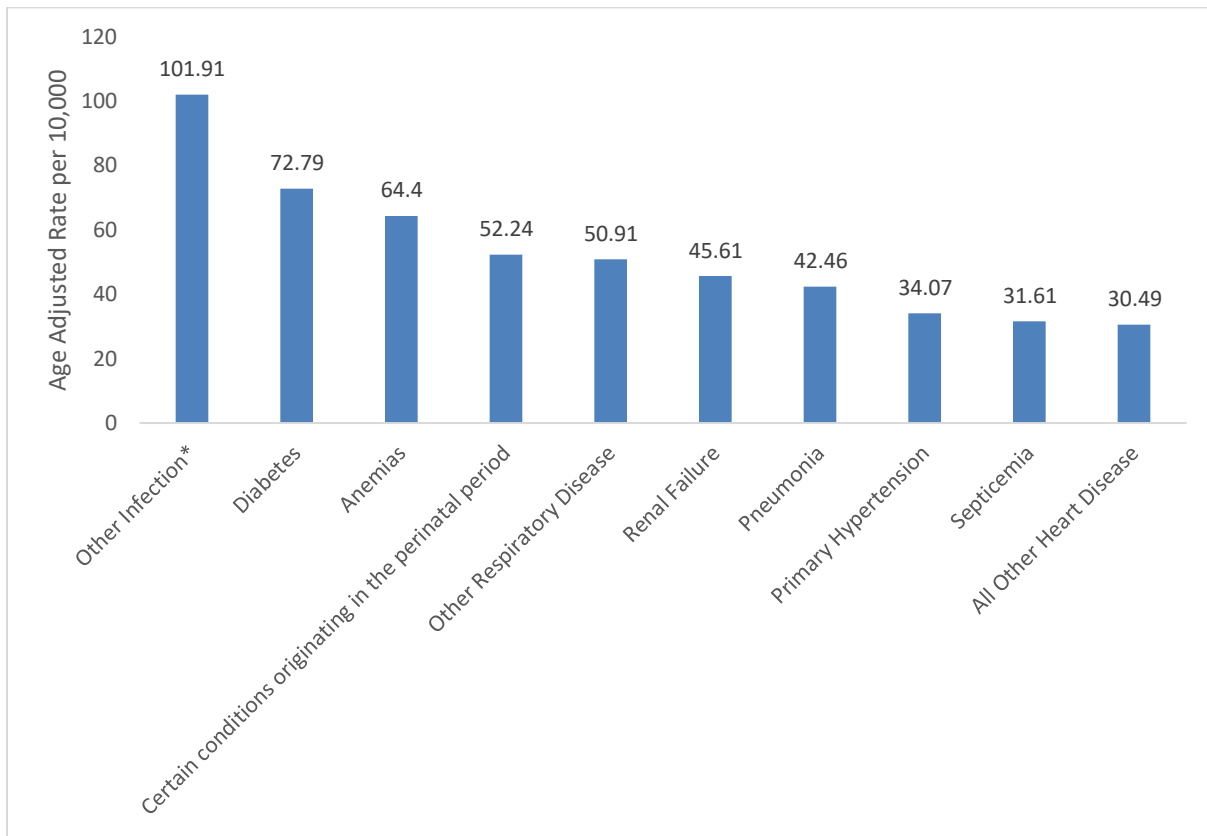
The health conditions and injury types with the largest gender differences for ER visits are highlighted here. In general females have higher ER visit rates for respiratory issues and males had higher ER visit rates for external injuries. Males had significantly higher rates than females for accidental discharge of firearms (3.93 and 0.84 respectively), legal intervention (6.79 and 1.47), alcohol poisoning (5.19 and 1.33), other land transportation injuries (47.56 and 18.95), cold exposure (6.91 and 3.04), injuries of undetermined intent (12.77 and 6.04), injuries from smoke/fire/flame (6.16 and 3.00), alcoholic liver disease (27.50 and 14.16), assault, other means (243.12 and 138.38), and chronic ischemic heart disease (16.17 and 10.02). Females have higher ER rates than males for infections of kidney (43.38 and 7.08 respectively), electrocution (5.30 and 2.56), cholelithiasis (44.94 and 24.46), in situ neoplasms (7.50 and 4.11), anemias

(54.80 and 32.73), other and unspecified infectious and parasitic diseases (334.88 and 233.3), other respiratory diseases (999.41 and 697.10), influenza (73.23 and 54.47), and chronic bronchitis (45.97 and 34.41).

The purpose of the report is to further describe which diseases, health conditions, and types of injury are contributing to the morbidity burden of the Navajo Nation. This data can be used by programs, projects, departments, divisions, and organizations to understand where resources can and should be allocated. As this is only the second report, true trends are not yet available. Some differences in rates may be due to random variation, but hopefully this report can begin to establish patterns. Future reports will be able to demonstrate which conditions are improving and which are becoming worse. This information can be utilized to demonstrate the impact of programs and projects working to address the health and disease burdens on the Navajo Nation.

Leading Causes of Hospitalization with State Comparisons

Chart 1 Leading Causes of Hospitalization on the Navajo Nation, Both Genders



*For a list of the most common “Other” infections see appendix

Chart 2 Next 10 Leading Causes of Hospitalization both Genders

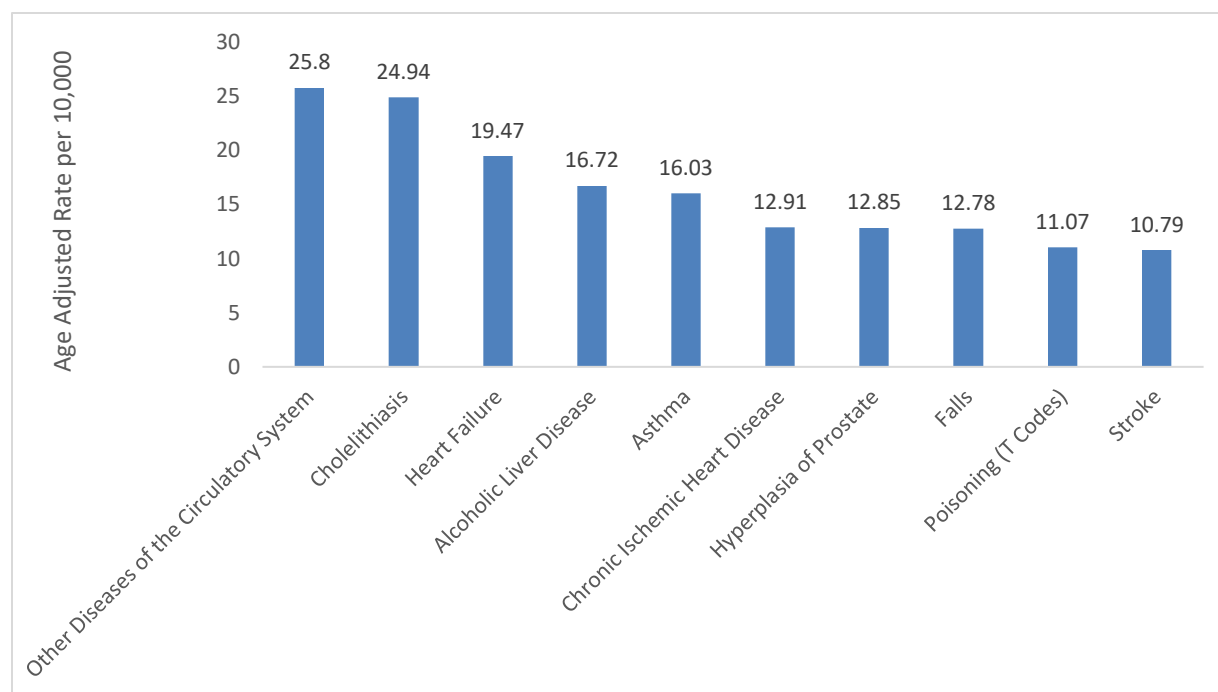
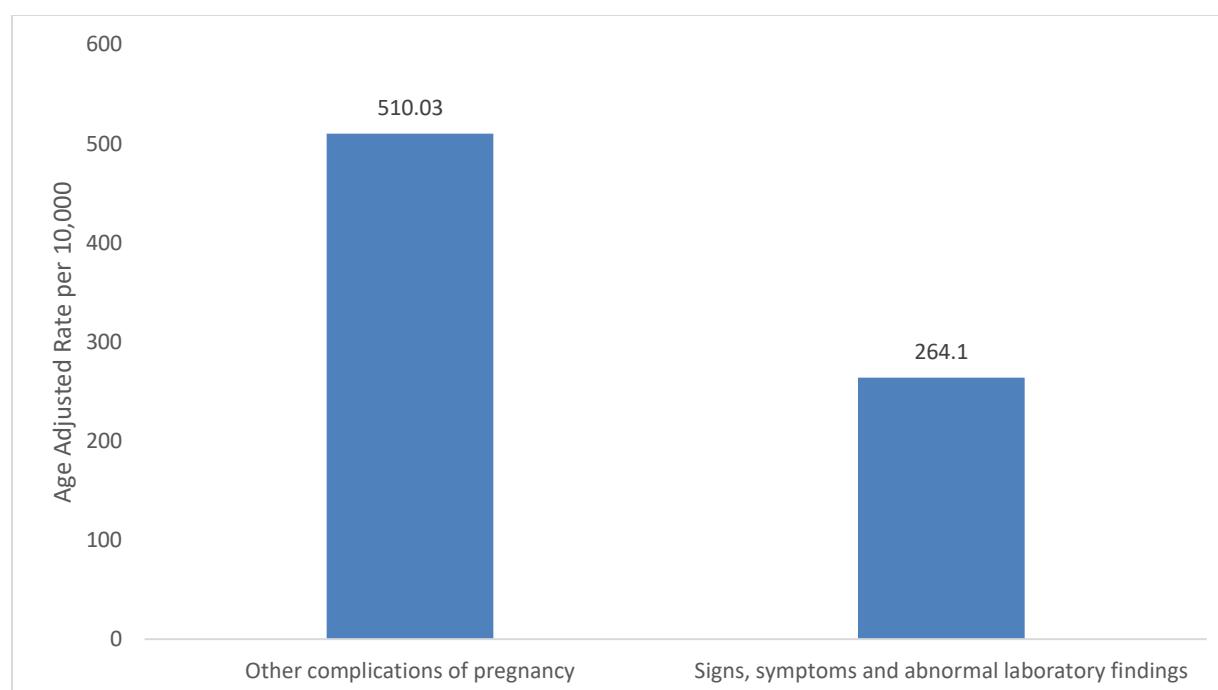
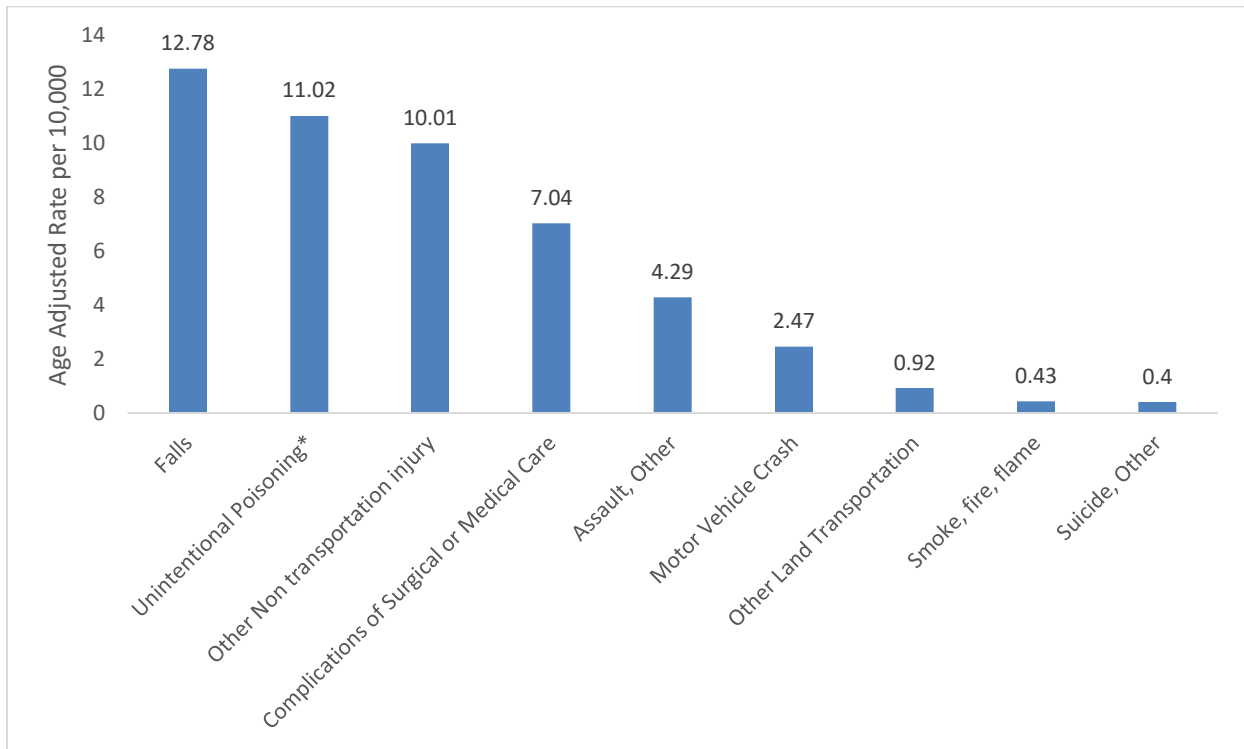


Chart 3 Pregnancy & Signs/Symptoms and Laboratory Findings



Other Pregnancy: Other complications of pregnancy, childbirth and the puerperium (i.e. not related to “Pregnancy with abortive outcome”)

Chart 4 External Causes (Intentional & Unintentional Injuries) of Hospitalization on the Navajo Nation, Both Genders



*Unintentional poisoning for the Navajo Nation was calculated using T-codes whereas the State comparisons utilized X codes, which were not available for the Navajo Nation.

Chart 5 Comparison of 2016 & 2017 Navajo Nation Hospitalizations

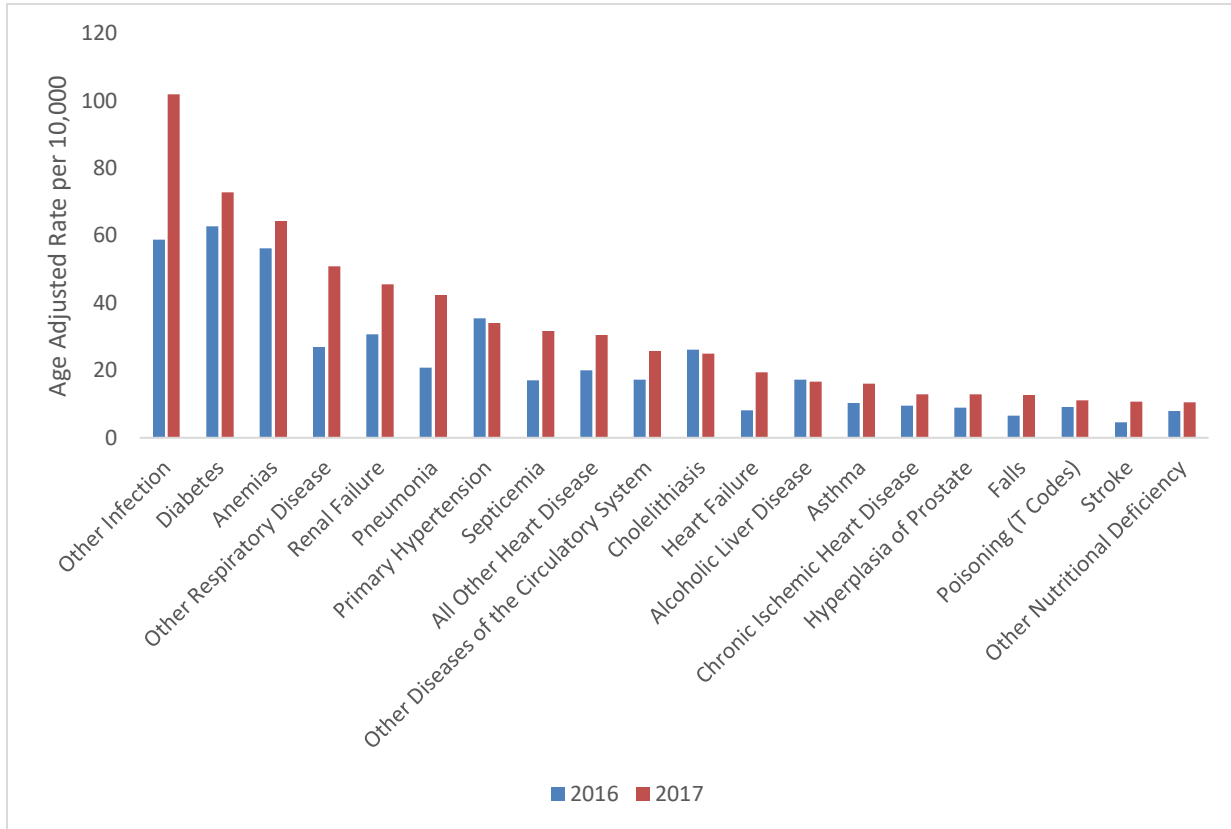
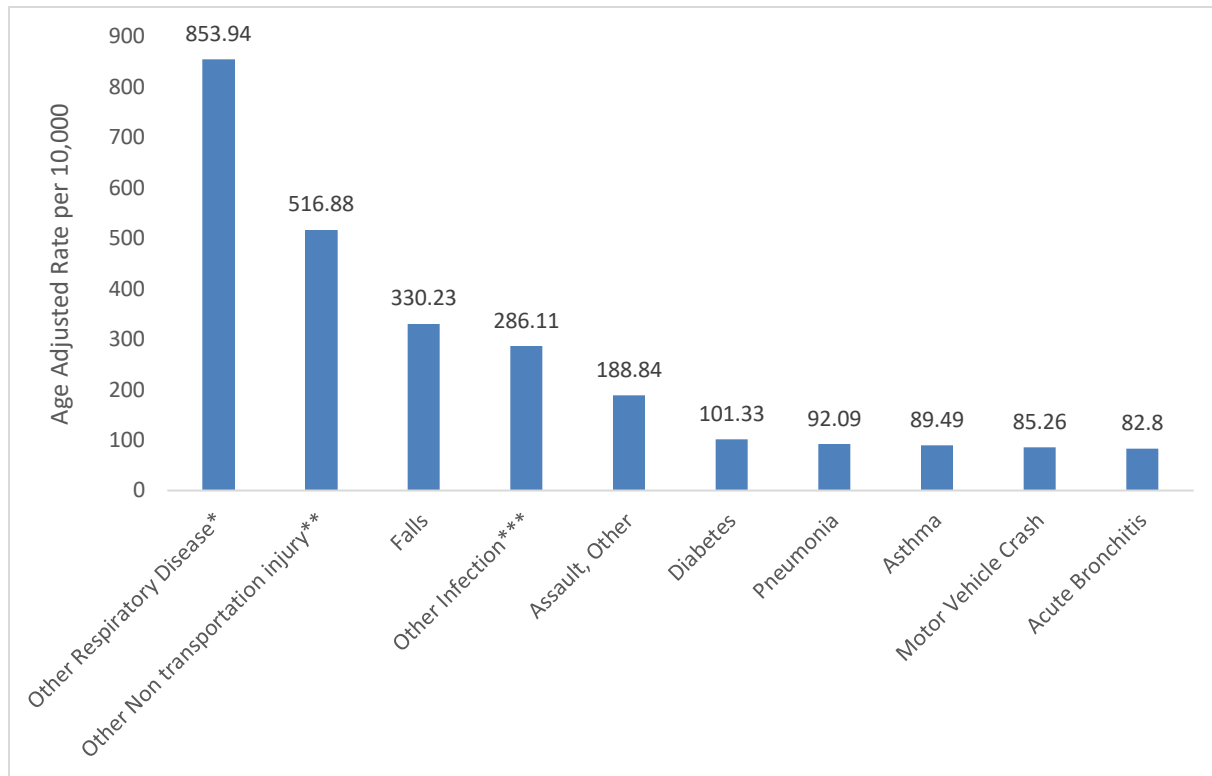


Chart 6 Ten Leading Causes of Emergency Room Visit



*A list of leading “Other Respiratory Disease” can be found in the appendix

**A list of leading “Other Non transportation injury” can be found in the appendix

***A list of leading “Other infection” can be found in the appendix

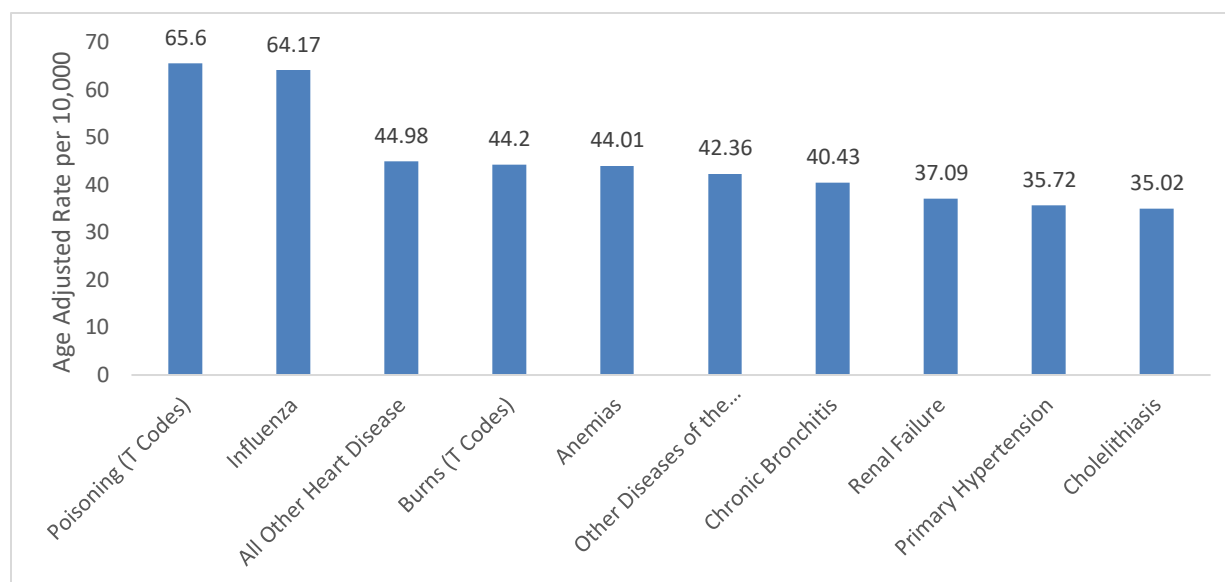
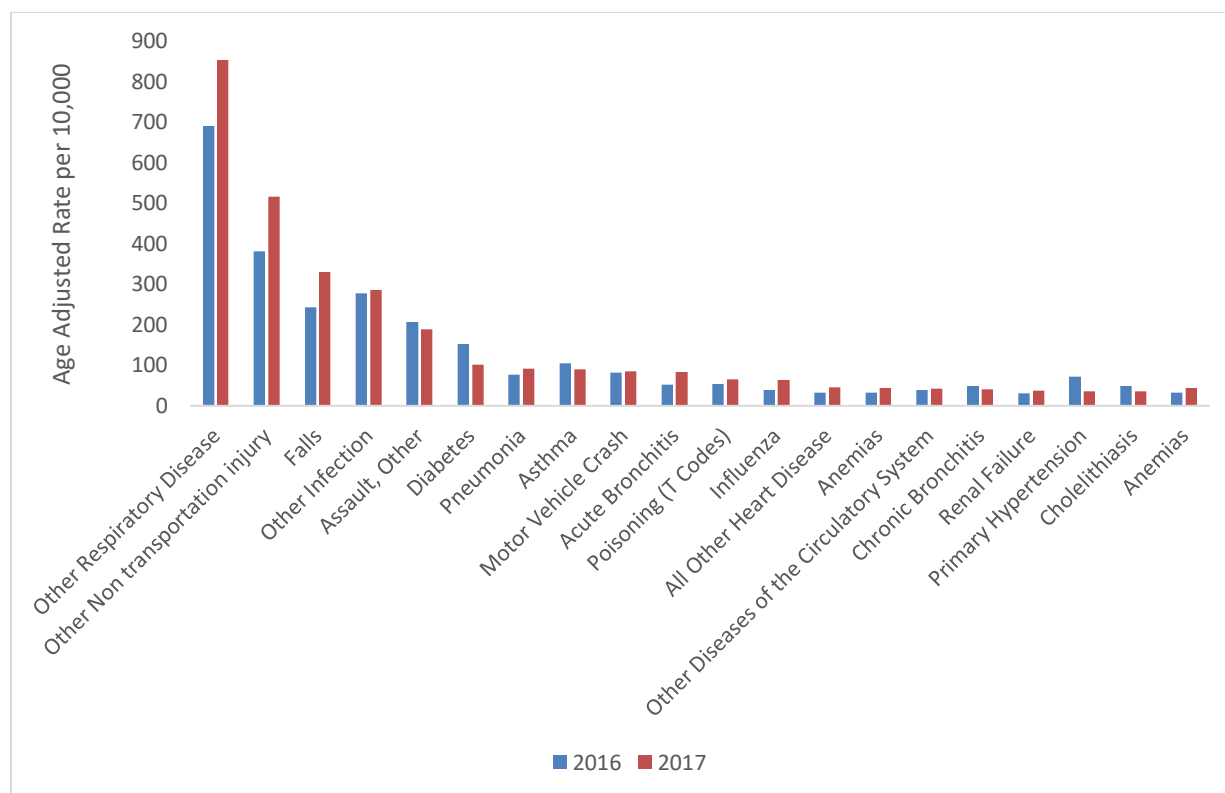
Chart 7 11th-20th Leading Cause of Emergency Room Visits

Chart 8 Comparison of 2016 & 2017 Emergency Room Visits



Certain infectious and parasitic diseases

Chart 9 Leading causes of Infectious Disease Emergency Room (ER) visits on the Navajo Nation, Both Genders

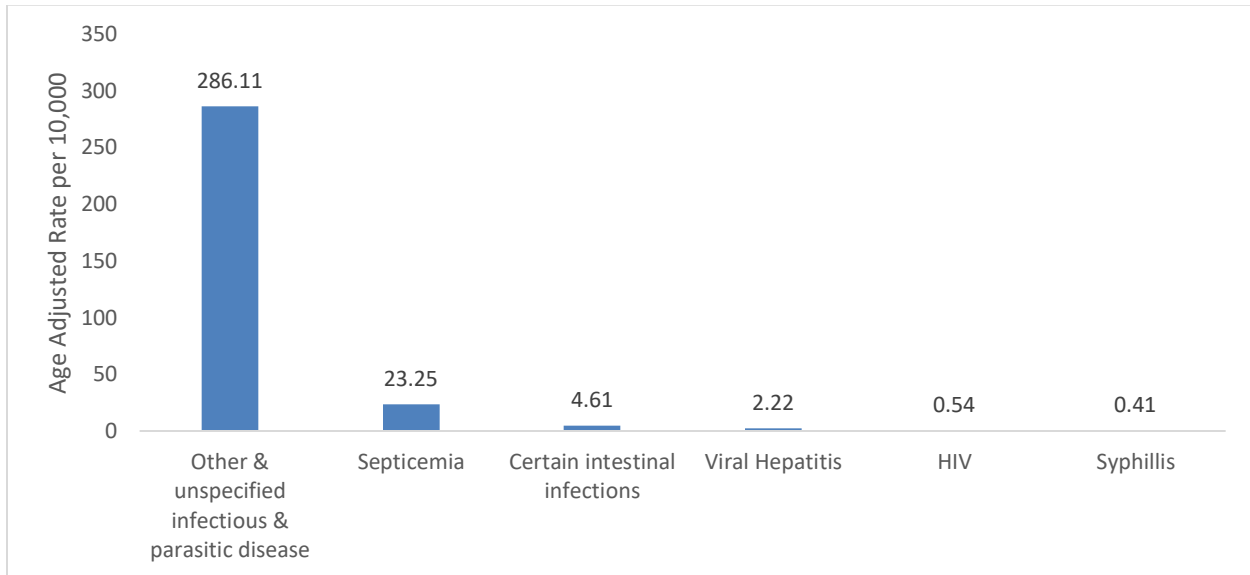


Chart 10 Leading causes of Infectious Disease Hospitalization on the Navajo Nation, Both Genders

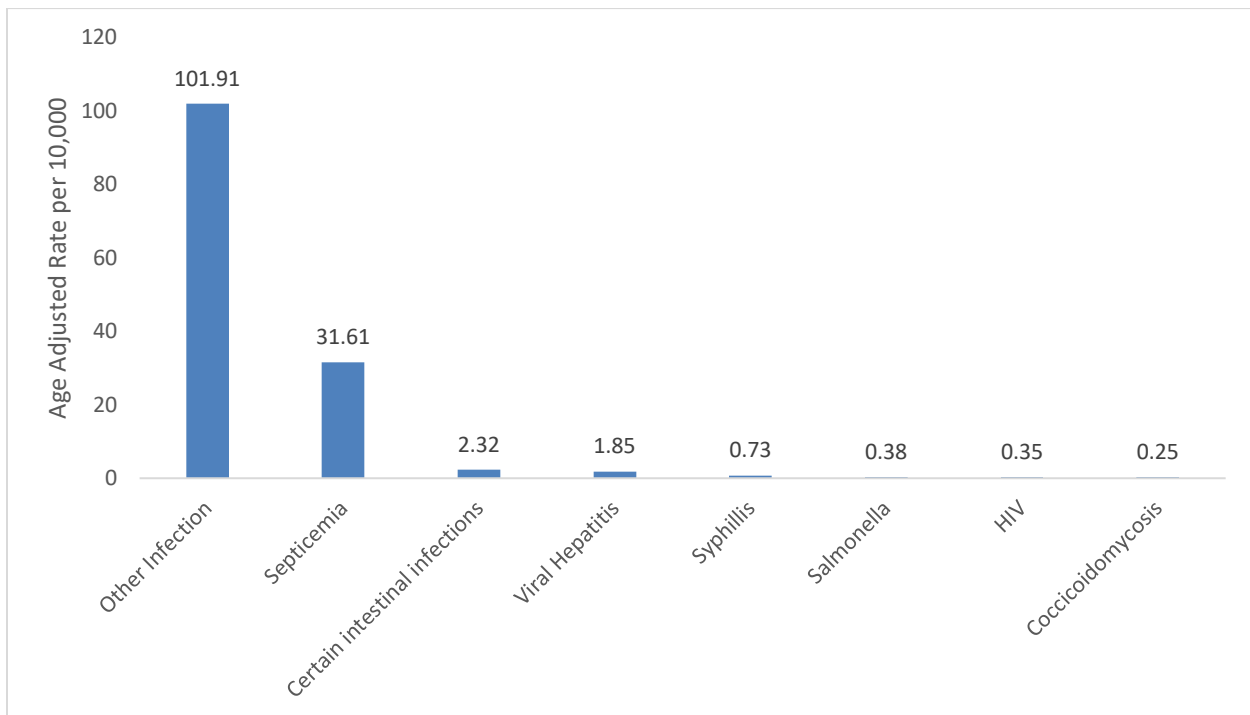


Chart 11 Infectious Disease ER Visits, by Gender

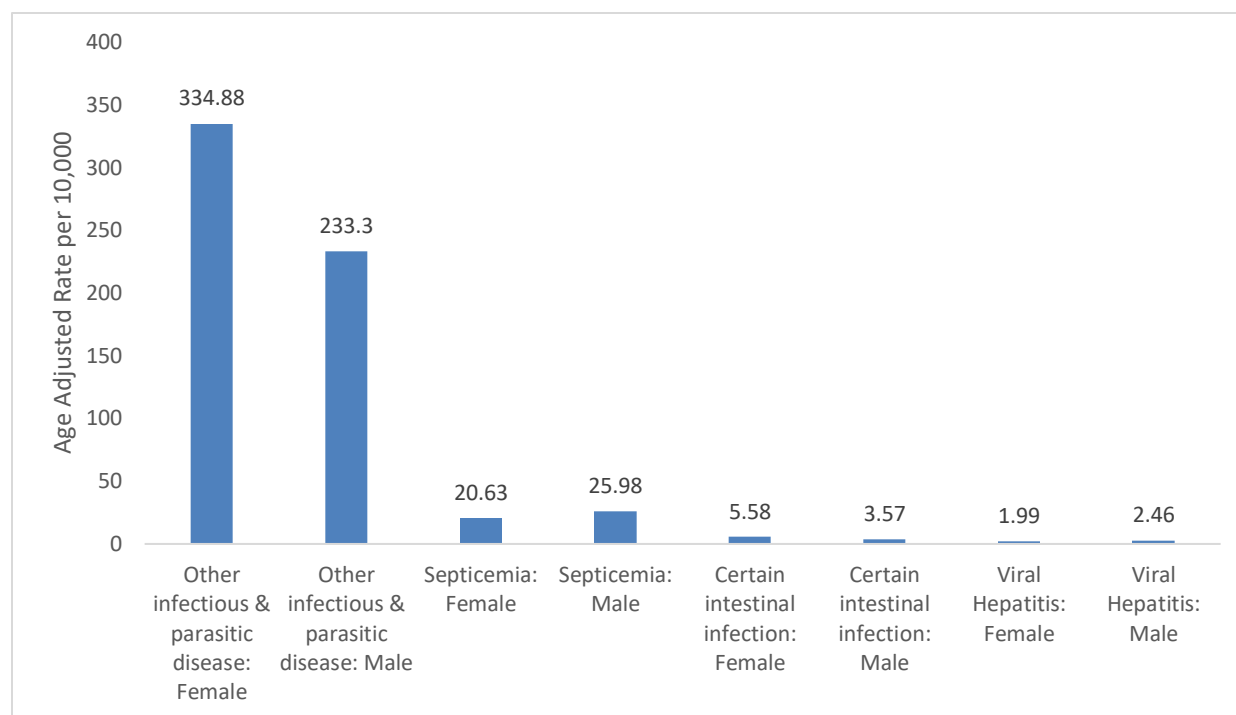


Chart 12 Infectious Disease Hospitalization, by Gender

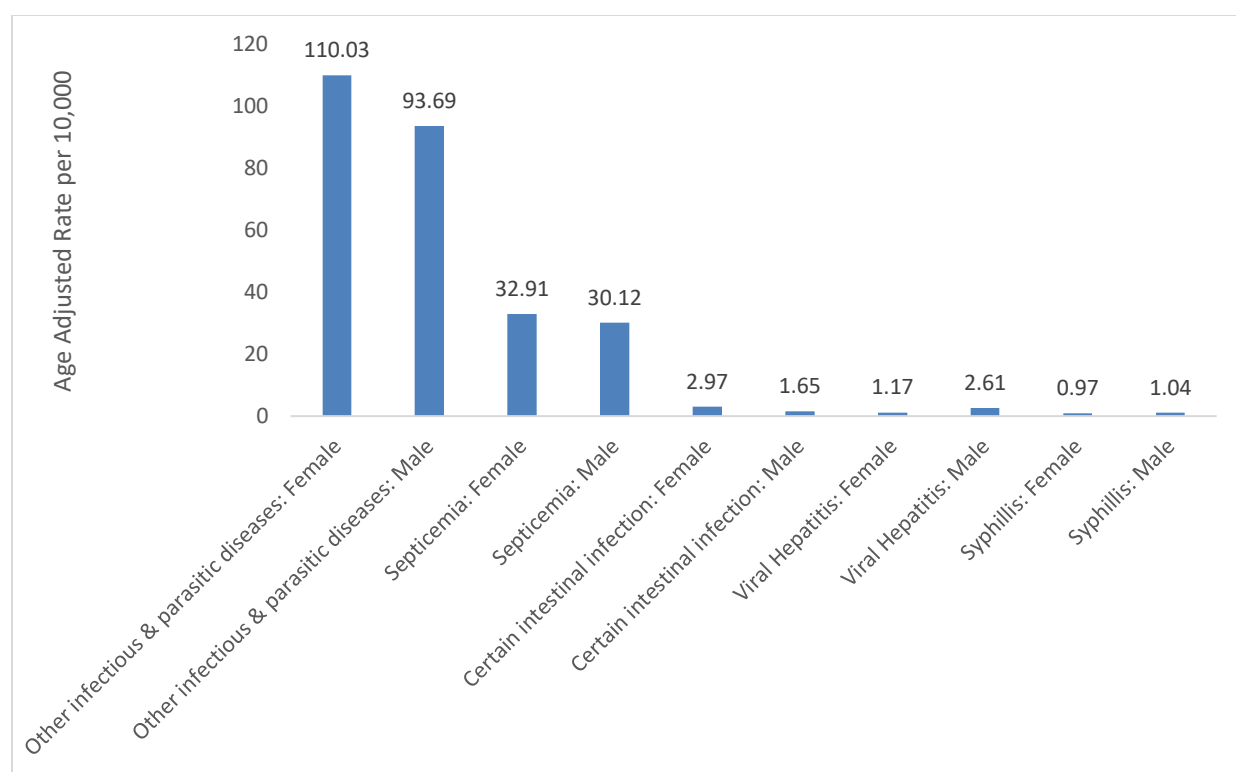


Table 1 Infectious Disease All Health Care Visits, Both Genders

Health Condition	Count	Age Adjusted Rate	Movement from 2016
Salmonella	44	2.22 (1.55, 2.90)	↔
Shigellosis	19	0.9 (0.49, 1.31)	↓
Certain other intestinal infections	1,024	55.14 (51.69, 58.58)	↔
Respiratory Tuberculosis	0	NA	↓
Other Tuberculosis	0	NA	↓
Pertussis	0	NA	↓
Scarlet Fever	0	NA	↓
Meningococcal Infection	NA	NA	NA
Septicemia	1,556	89.18 (84.68, 93.69)	↑
Syphilis	336	18.58 (16.55, 20.60)	↑
Polio	NA	NA	NA
Arthropod Borne Viral Encephalitis	0	NA	↓
Measles	NA	NA	NA
Viral Hepatitis	466	25.83 (23.44, 28.21)	↔
HIV	105	5.81 (4.68, 6.95)	↔
Malaria	NA	NA	NA
All Other	41,508	2,110.66 (2089.86, 2,131.45)	↑

Note: Not Available (NA) if fewer than 5 cases

Table 2 Infectious Disease ER Visits, Both Genders

Health Condition	Count	Age Adjusted Rate	Movement from 2016
Salmonella	NA	NA	NA
Shigellosis	NA	NA	NA
Certain other intestinal infections	83	4.61 (3.60, 5.63)	↓
Respiratory Tuberculosis	0	NA	↓
Other Tuberculosis	0	NA	↓
Pertussis	0	NA	↓
Scarlet Fever	0	NA	↓
Meningococcal Infection	0		
Septicemia	411	23.25 (20.97, 25.54)	↑
Syphilis	8	0.41 (0.12, 0.69)	↔
Polio	0	NA	↓
Arthropod Borne Viral Encephalitis	0	NA	↓
Measles	0	NA	↔
Viral Hepatitis	41	2.22 (1.53, 2.91)	↔
HIV	10	0.54 (0.20, 0.89)	↔
Malaria	NA	NA	↑
All Other	5,789	286.11 (278.56, 293.66)	↔

Table 3 Infectious Disease Hospitalization, Both Genders

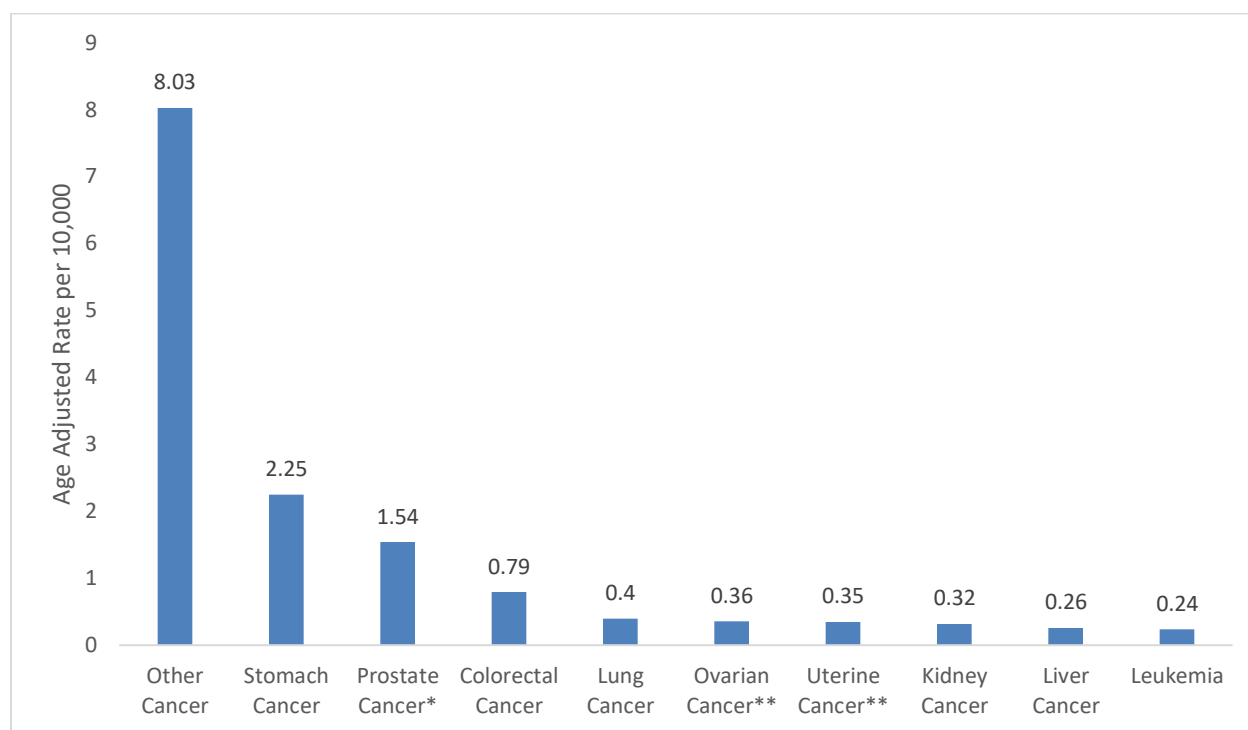
Health Condition	Count	Age Adjusted Rate	Movement from 2016
Salmonella	7	0.38 (0.12, 0.63)	NA
Shigellosis	NA	NA	NA
Certain other intestinal infections	39	2.32 (1.66, 2.98)	↔
Respiratory Tuberculosis	0	NA	A
Other Tuberculosis	0	NA	↓
Pertussis	0	NA	↔
Scarlet Fever	0	NA	↓
Meningococcal Infection	0	NA	↔
Septicemia	546	31.61 (29.20, 34.02)	↑
Syphilis	13	0.73 (0.35, 1.12)	↔
Polio	0	NA	↓
Arthropod Borne Viral Encephalitis	0	NA	↔
Measles	0	NA	↓
Viral Hepatitis	32	1.85 (1.20, 2.50)	↔
HIV	6	0.35 (0.06, 0.63)	NA
Malaria	0	NA	↔
All Other	1,775	101.91 (97.5, 106.31)	↑

Table 3a Infectious disease Hospitalizations, by Gender

Disease	Female Count	Female Rate	Male Count	Male Rate
Certain other intestinal infections	25	2.97 (1.79, 4.16)	14	1.65 (0.77, 2.53)
Septicemia	295	32.91 (29.07, 36.75)	251	30.12 (26.35, 33.89)
Viral Hepatitis	10	1.17 (0.44, 1.90)	22	2.61 (1.50, 3.71)
All Other	973	110.03 (102.95, 117.10)	802	93.69 (87.11, 100.26)

Neoplasms

Chart 13 Leading Neoplasm Site Hospitalizations, Bother Genders



*Only males were included in the calculation of this rate

**Only females were included in the calculation of this rate

Chart 14 Neoplasm Hospitalizations, by Gender

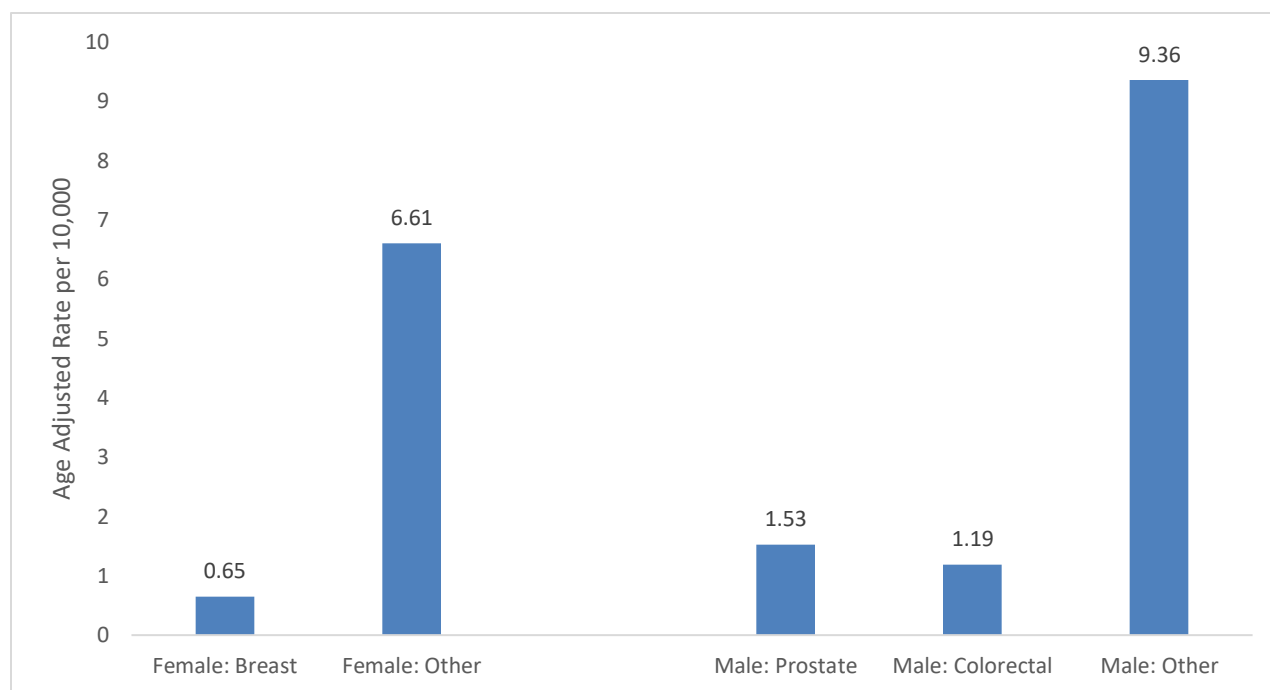


Table 4 Neoplasm All Health Care Visits, Both Genders

Cancer Site	Count	Age Adjusted Rate	Movement
Lip, Oral & Pharynx	0	NA	↔
Esophagus	20	1.13 (0.63, 1.63)	NA
Stomach	96	5.30 (4.22, 6.37)	↑
Colorectal	323	17.71 (15.75, 19.67)	↔
Liver	77	4.33 (3.35, 5.31)	↔
Pancreas	39	2.24 (1.53, 2.96)	↔
Larynx	NA	NA	NA
Lung	61	3.63 (2.71, 4.56)	↔
Melanoma	28	1.55 (0.97, 2.13)	↔
Breast*	533	55.93 (51.08, 60.89)	↔
Cervical*	31	2.02 (2.02, 4.28)	↔
Uterine*	89	9.36 (7.38, 11.35)	↔
Ovary*	62	6.43 (4.99, 8.39)	↔
Prostate**	161	19.83 (16.74, 22.91)	↔
Kidney	199	11.15 (9.58, 12.73)	↔
Bladder	14	0.82 (0.38, 1.25)	↔
Brain	28	1.65 (1.03, 2.27)	↔
Hodgkin's	NA	NA	NA
Non-Hodgkin's	131	7.32 (6.05, 8.59)	↔
Multiple Myeloma	0	NA	↔
Leukemia	80	4.42 (3.43, 5.41)	↔
Lymphoid	NA	NA	NA
Other	1,089	61.56 (57.84, 65.28)	↑

*Female only (3 cases of male breast cancer not included in calculations)

**Male only

Table 5 Neoplasm ER Visits, Both Genders

Cancer Site	Count	Age Adjusted Rate	Movement
Lip, Oral & Pharynx	0	NA	↔
Esophagus	NA	NA	NA
Stomach	6	0.31 (0.06, 0.56)	NA
Colorectal	9	0.50 (0.06, 0.56)	↔
Liver	5	0.32 (0.04, 0.60)	↔
Pancreas	NA	NA	NA
Larynx	0	NA	↔
Lung	9	0.54 (0.18, 0.90)	NA
Melanoma	NA	NA	NA
Breast	7	0.71 (0.13, 1.28)	NA
Cervical	NA	NA	NA
Uterine	NA	NA	NA
Ovary	NA	NA	NA
Prostate	5	0.64 (0.08, 1.20)	↔
Kidney	13	0.80 (0.36, 1.24)	NA
Bladder	0	NA	NA
Brain	NA	NA	NA
Hodgkin's	NA	NA	NA
Non-Hodgkin's	NA	NA	NA
Multiple Myeloma	NA	NA	NA
Leukemia	11	0.65 (0.26, 1.04)	↔
Lymphoid	0	NA	NA
Other	61	3.58 (2.67 4.49)	↔

Table 6 Neoplasm Hospitalizations, Both Genders

Cancer Site	Count	Age Adjusted Rate	Movement
Lip, Oral & Pharynx	0	NA	NA
Esophagus	NA	NA	NA
Stomach	5	2.25 (1.47, 3.03)	NA
Colorectal	14	0.79 (0.45, 1.13)	↔
Liver	NA	NA	NA
Pancreas	NA	NA	NA
Larynx	0	NA	NA
Lung	6	0.40 (0.13, 0.67)	NA
Melanoma	0	NA	NA
Breast	7	0.65 (0.16, 1.14)	NA
Cervical	0	NA	NA
Uterine	NA	NA	NA
Ovary	NA	NA	NA
Prostate	12	1.54 (0.66, 2.41)	↔
Kidney	5	0.32 (0.07, 0.58)	↔
Bladder	NA	NA	NA
Brain	0	NA	NA
Hodgkin's	0	NA	NA
Non-Hodgkin's	NA	NA	NA
Multiple Myeloma	0	NA	NA
Leukemia	NA	NA	NA
Lymphoid	0	NA	NA
Other	143	8.03 (6.83, 9.23)	↑

Table 6A Neoplasm Hospitalization, by Gender

Cancer Site	Female Count	Female Rate	Male Count	Male Rate
Other	64	6.61 (4.95, 8.26)	79	9.36 (7.27, 11.45)

Diseases of the blood and blood forming organs and certain disorders involving the immune mechanism

Chart 15 Diseases of the blood and blood forming organs ER Visits, Both Genders

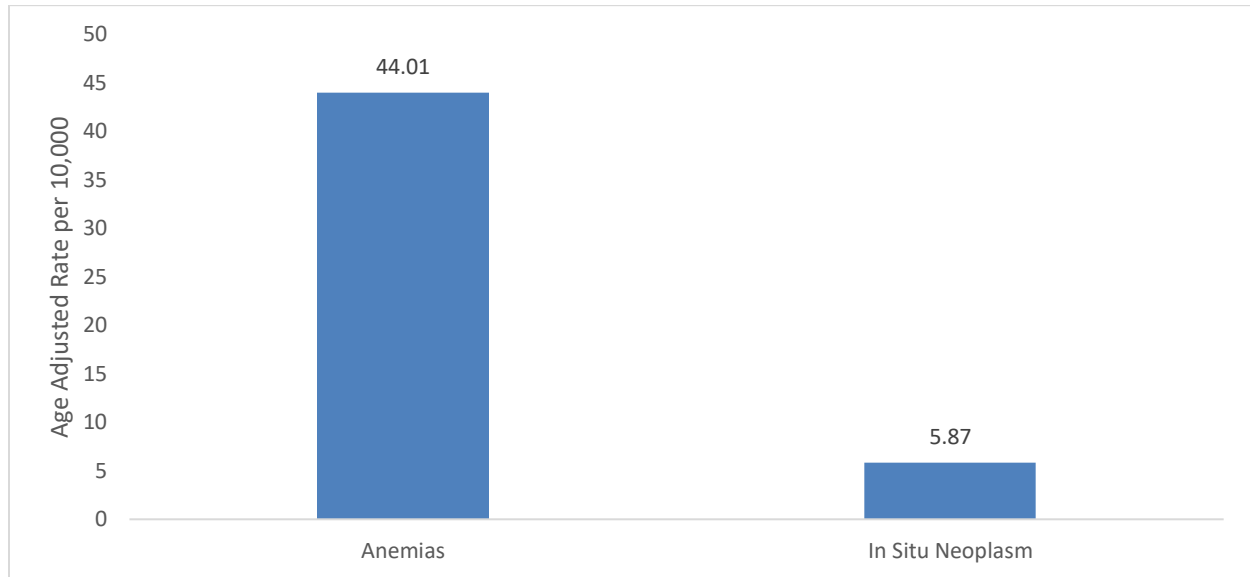


Chart 16 Diseases of the blood and blood forming organs Hospitalization, Both Genders

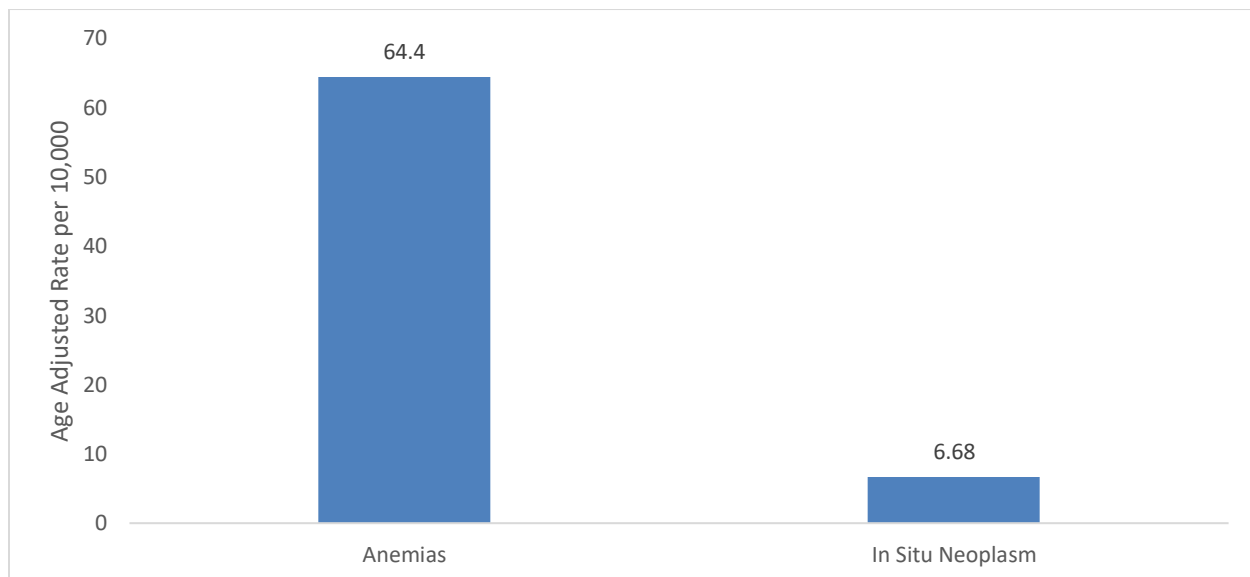


Chart 17 Diseases of the Blood & Blood Forming Organs Hospitalization, by Gender

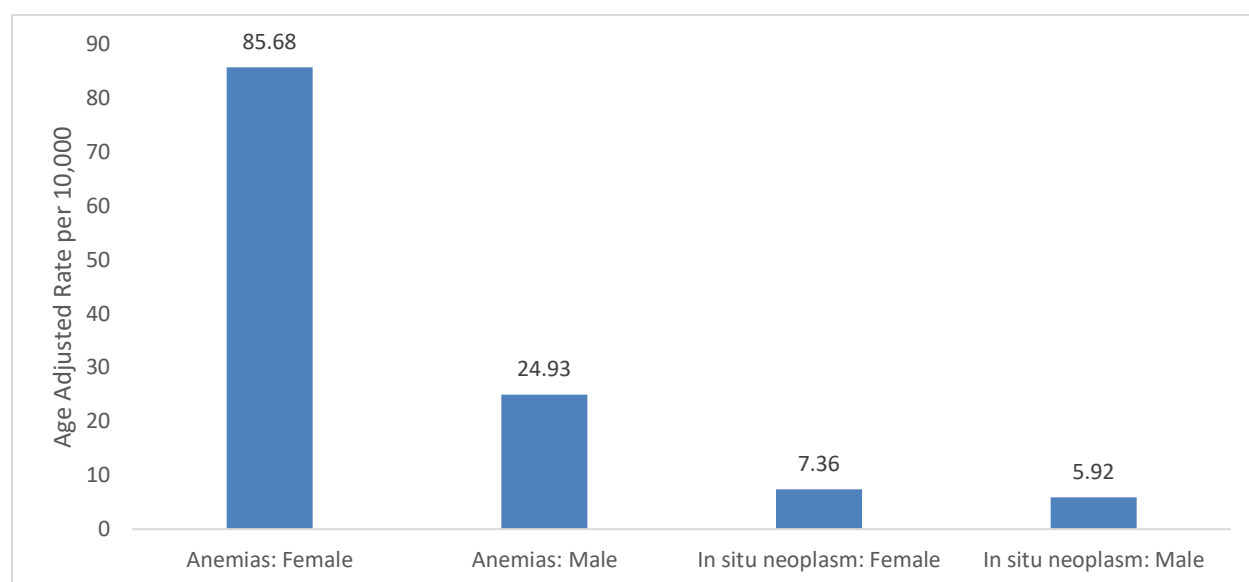


Table 7 Diseases of the blood and blood forming organs and certain disorders involving the immune system All Health Care Visits, Both Genders

Health Condition	Count	Age Adjusted Rate	Movement
In Situ Neoplasms	6,786	361.47 (352.72, 370.23)	↔
Anemias	9,587	531.34 (520.48, 542.20)	↑

Table 8 Diseases of the blood and blood forming organs and certain disorders involving the immune system ER Visits, Both Genders

Health Condition	Count	Age Adjusted Rate	Movement
In Situ Neoplasms	104	5.87 (4.72, 7.02)	↔
Anemias	760	44.01 (40.83, 47.19)	↑

Table 9 Diseases of the blood and blood forming organs and certain disorders involving the immune system Hospitalizations, Both Genders

Health Condition	Count	Age Adjusted Rate	Movement
In Situ Neoplasms	117	6.68 (5.56, 7.80)	↔
Anemias	1,128	64.40 (60.90, 67.90)	↑

Table 9a Diseases of the blood and blood forming organs and certain disorders involving the immune system Hospitalizations, by Gender

Health Condition	Female Count	Female Rate	Male Count	Male Rate
In Situ Neoplasms	67	7.36 (5.55, 9.17)	37	5.92 (4.27, 7.57)
Anemias	479	85.68 (79.50, 85.68)	281	24.93 (23.89, 25.98)

Endocrine, nutritional and metabolic diseases

Chart 18 Endocrine, nutritional and metabolic diseases ER Visits, Both Genders

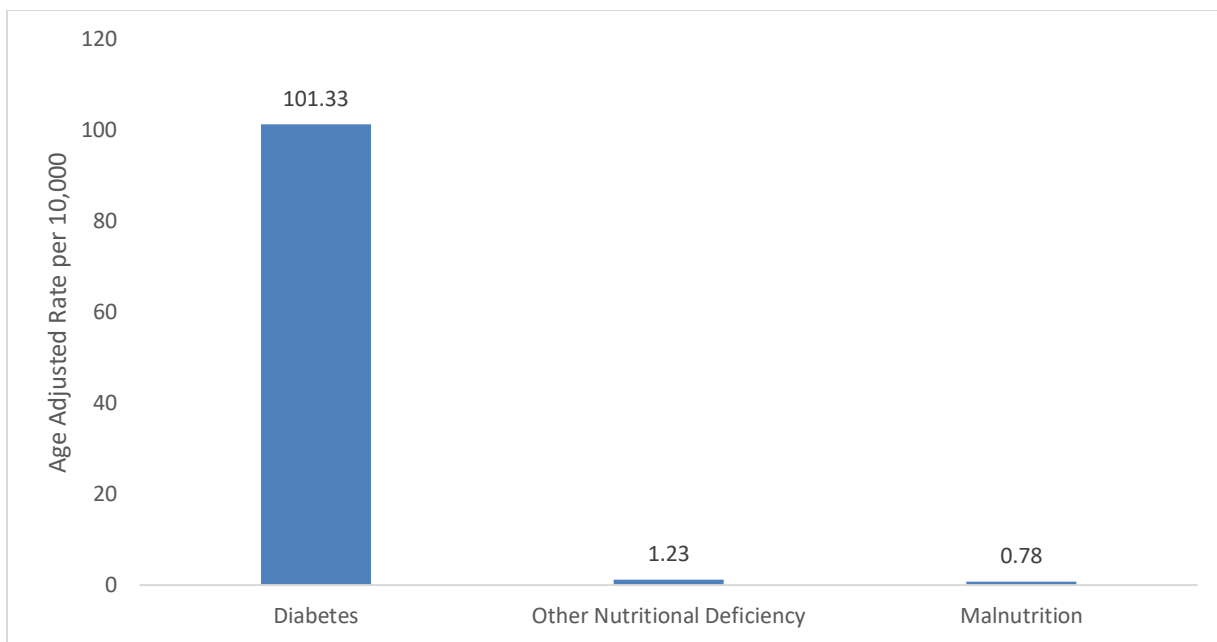


Chart 19 Endocrine, nutritional and metabolic diseases Hospitalization, Both Genders

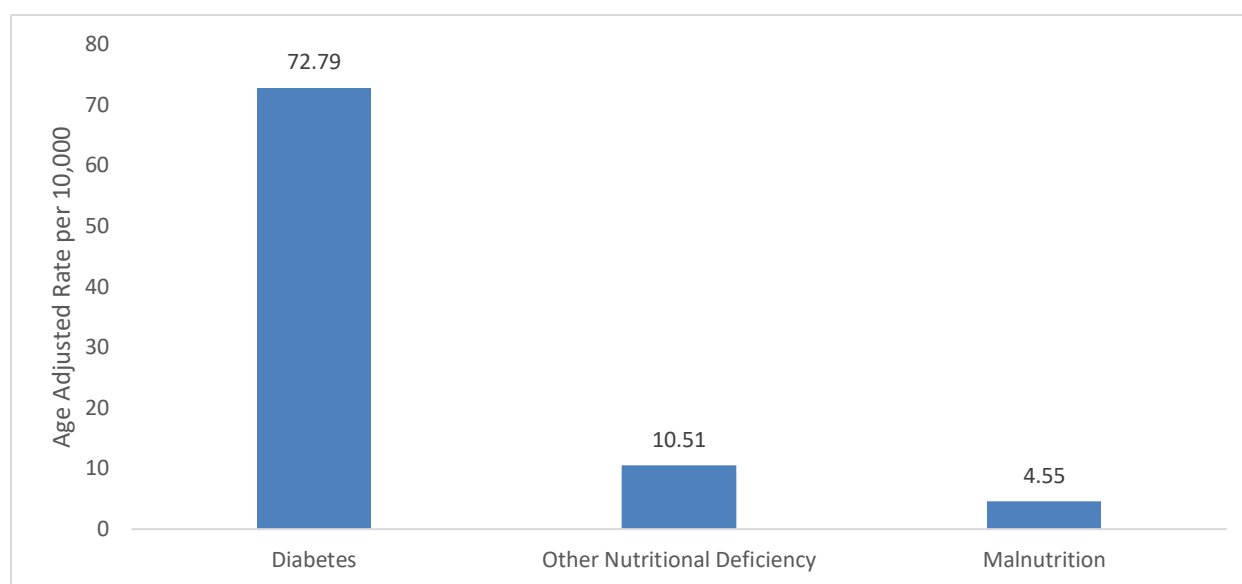


Chart 20 Endocrine, Nutritional & Metabolic Diseases Hospitalization, by Gender

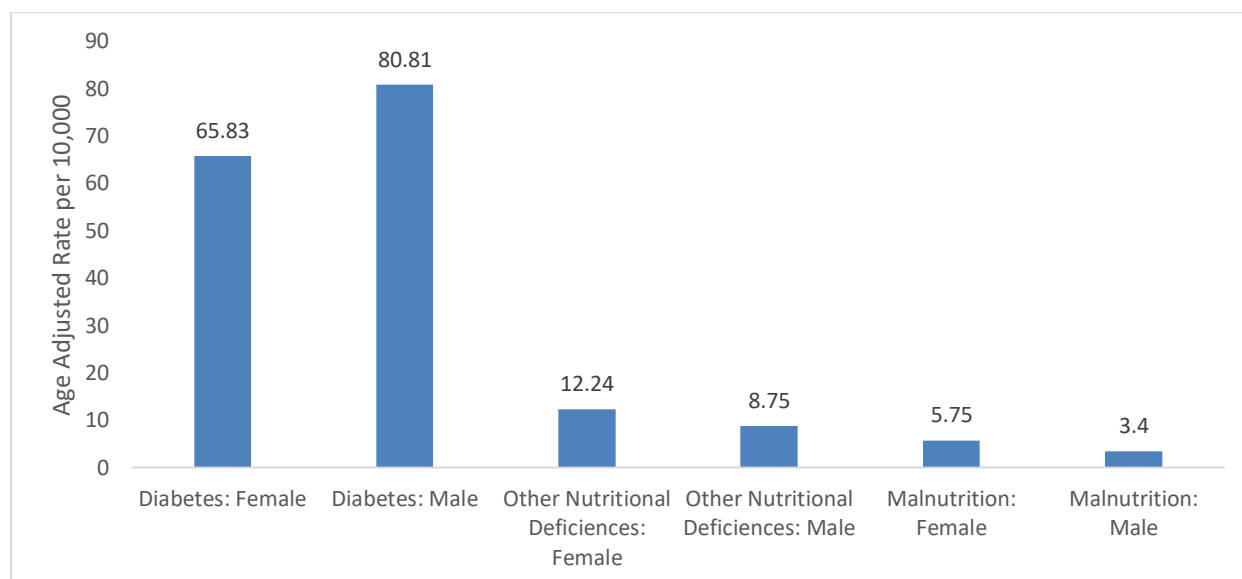


Table 10 Endocrine, nutritional and metabolic diseases All Health Care Visits, Both Genders

Health Condition	Count	Age Adjusted Rate	Movement
Diabetes	29,630	1632.19 (1613.31, 1651.07)	↓
Malnutrition	415	24.89 (22.45, 27.33)	↑
Other Nutritional Deficiencies	10,226	563.30 (552.18, 574.43)	↓

Table 11 Endocrine, nutritional and metabolic diseases ER Visits, Both Genders

Health Condition	Count	Age Adjusted Rate	Movement
Diabetes	1,797	101.33 (96.57, 106.09)	↓
Malnutrition	13	0.78 (0.35, 1.21)	↑
Other Nutritional Deficiencies	20	1.23 (0.69, 1.78)	↔

Table 12 Endocrine, nutritional and metabolic diseases Hospitalizations, Both Genders

Health Condition	Count	Age Adjusted Rate	Movement
Diabetes	1,272	72.79 (68.72, 76.85)	↑
Malnutrition	73	4.55 (3.49, 5.61)	↑
Other Nutritional Deficiencies	176	10.51 (8.93, 12.08)	↔

Table 12a Endocrine, nutritional and metabolic diseases Hospitalizations, by Genders

Health Condition	Female Count	Female Rate	Male Count	Male Rate
Diabetes	578	65.83 (60.36, 71.29)	694	80.81 (74.72, 86.91)
Malnutrition	45	5.75 (4.04, 7.45)	28	3.40 (2.13, 4.68)
Other Nutritional Deficiencies	102	12.24 (9.82, 14.66)	74	8.75 (6.73, 10.77)

Mental and behavioral disorders

This block is not part of the NCHS 113 but is of interest to the Navajo Nation.

Chart 21 Dementia, by Gender

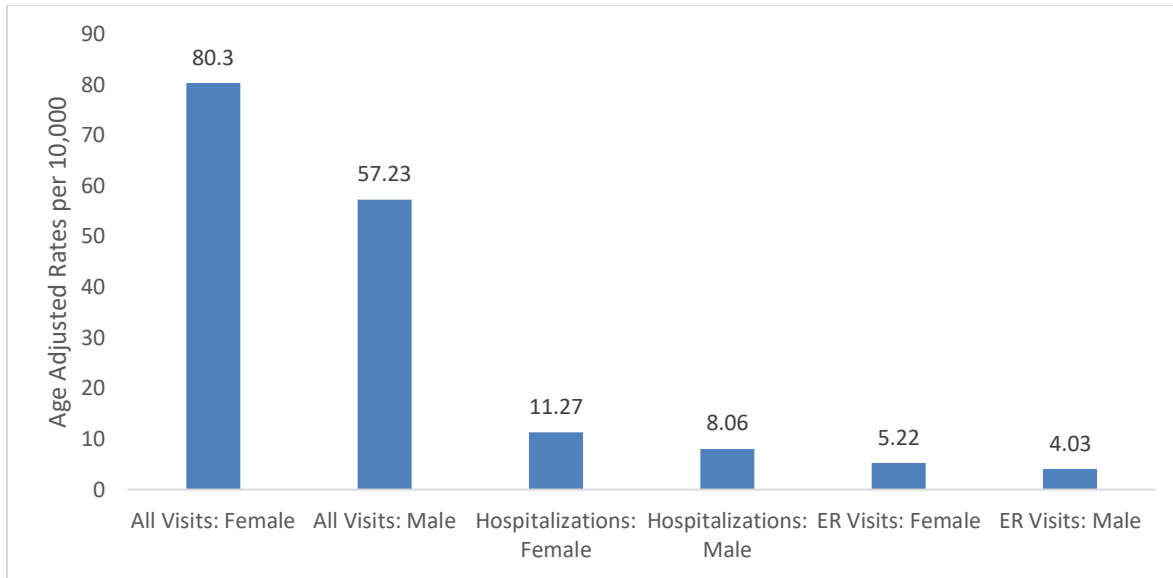


Table 13 Dementias, Both Genders

Clinic Category	Count	Age Adjusted Rate	Movements
All Visits	1,040	68.98 (64.76, 73.20)	↑
ER Vists	70	4.68 (3.58, 5.78)	↑
Hospitalizations	145	9.74 (8.15, 11.33)	↑

Table 13a Dementias, by Genders

Health Condition	Female Count	Female Rate	Male Count	Male Rate
All Visits	597	80.30 (73.82, 86.79)	443	57.23 (51.87, 62.58)
ER Visits	39	5.22 (3.58, 6.86)	31	4.03 (2.60, 5.45)
Hospitalizations	84	11.27 (8.84, 13.69)	61	8.06 (6.03, 10.09)

Diseases of the nervous system

Chart 22 Diseases of the Nervous System ER Visits, Both Genders

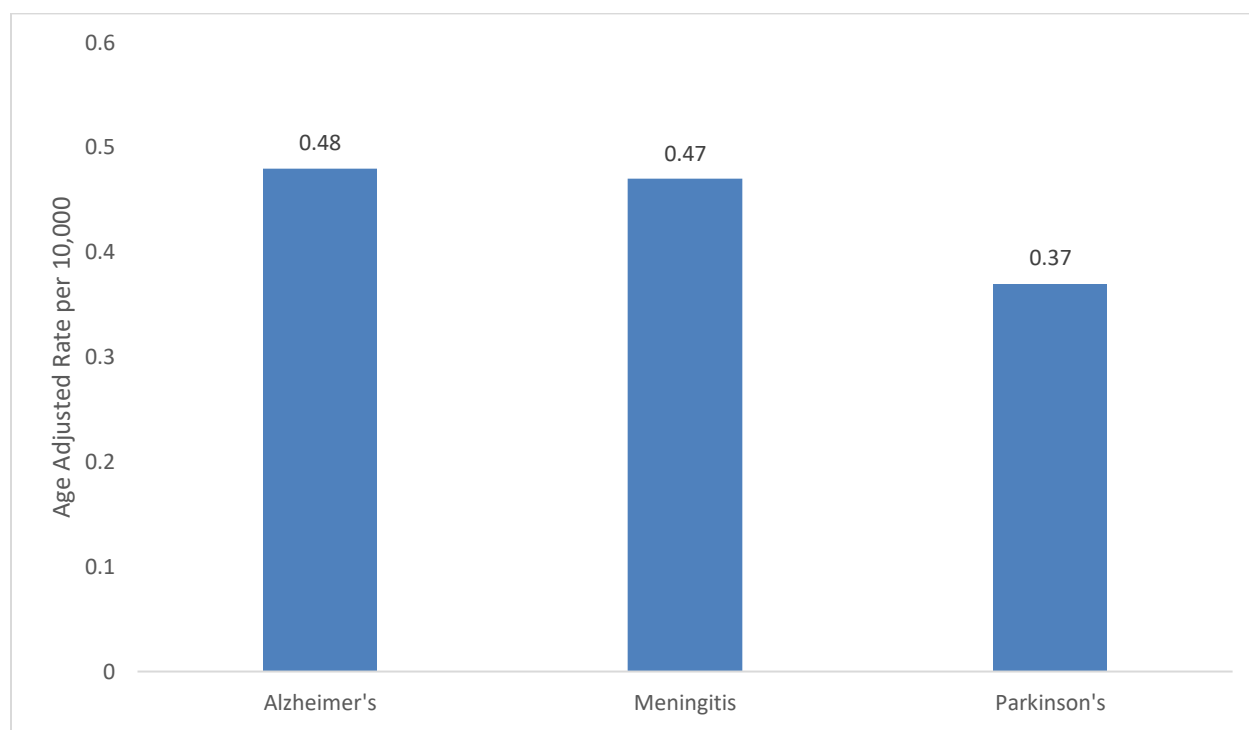


Chart 23 Diseases of the Nervous System Hospitalization, Both Genders

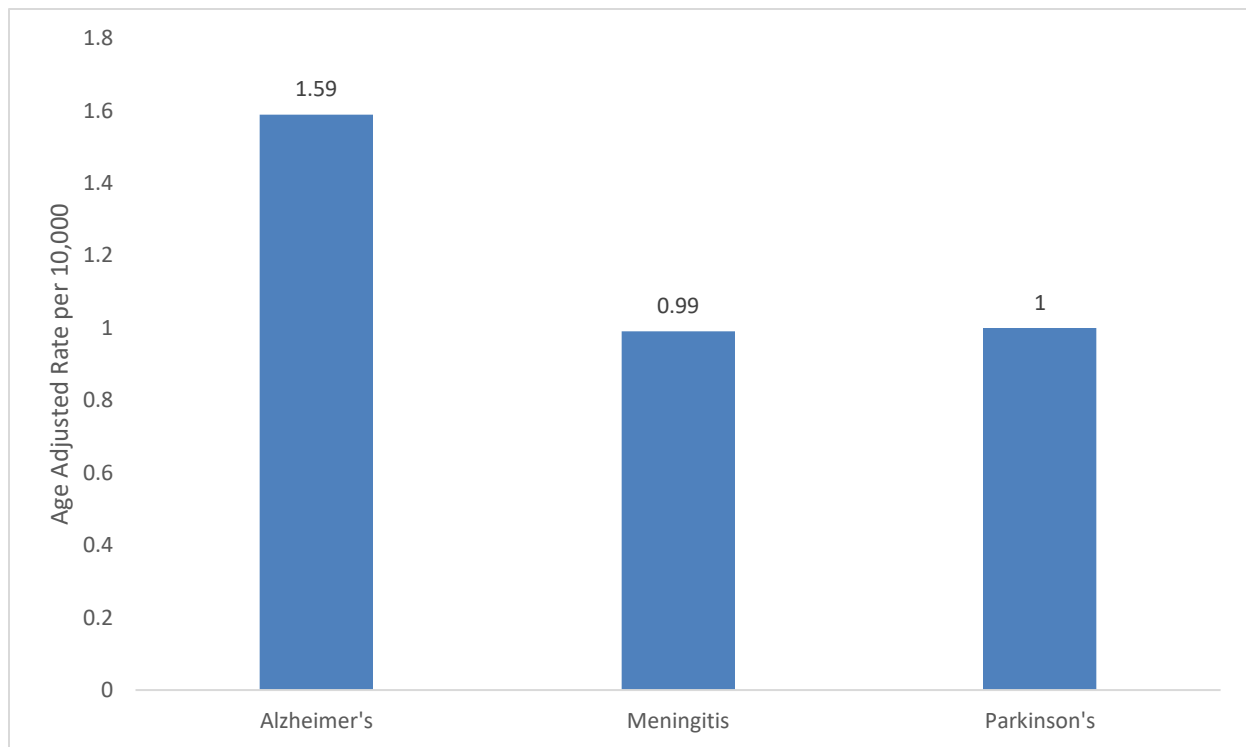


Table 14 Diseases of the Nervous System All Health Care Visits, Both Genders

Health Condition	Count	Age Adjusted Rate	Movement
Alzheimer's	167	11.24 (9.53, 12.95)	↑
Meningitis	743	3.89 (2.98, 4.80)	↑
Parkinson's	214	12.78 (11.04, 14.52)	↔

Table 15 Diseases of the Nervous System ER Visits, Both Genders

Health Condition	Count	Age Adjusted Rate	Movement
Alzheimer's	7	0.48 (0.12, 0.84)	↔
Meningitis	10	0.47 (0.17, 0.76)	↔
Parkinson's	6	0.37 (0.07, 0.67)	↔

Table 16 Diseases of the Nervous System Hospitalizations, Both Genders

Health Condition	Count	Age Adjusted Rate	Movement
Alzheimer's	23	1.59 (0.94, 2.24)	↑
Meningitis	18	0.99 (0.52, 1.46)	↑
Parkinson's	15	1.00 (0.49, 1.52)	↑

Table 16a Diseases of the Nervous System Hospitalizations, By Genders

Health Condition	Female Count	Female Rate	Male Count	Male Rate
Alzheimer's	14	1.98 (0.84, 3.02)	9	1.20 (0.42, 1.99)
Meningitis	12	1.36 (0.60, 2.11)	6	0.59 (0.06, 1.12)
Parkinson's	7	0.95 (0.24, 1.66)	8	1.05 (0.32, 1.77)

Diseases of the circulatory system

Chart 24 Diseases of the Circulatory System: Leading 10 causes of ER Visit, Both Genders

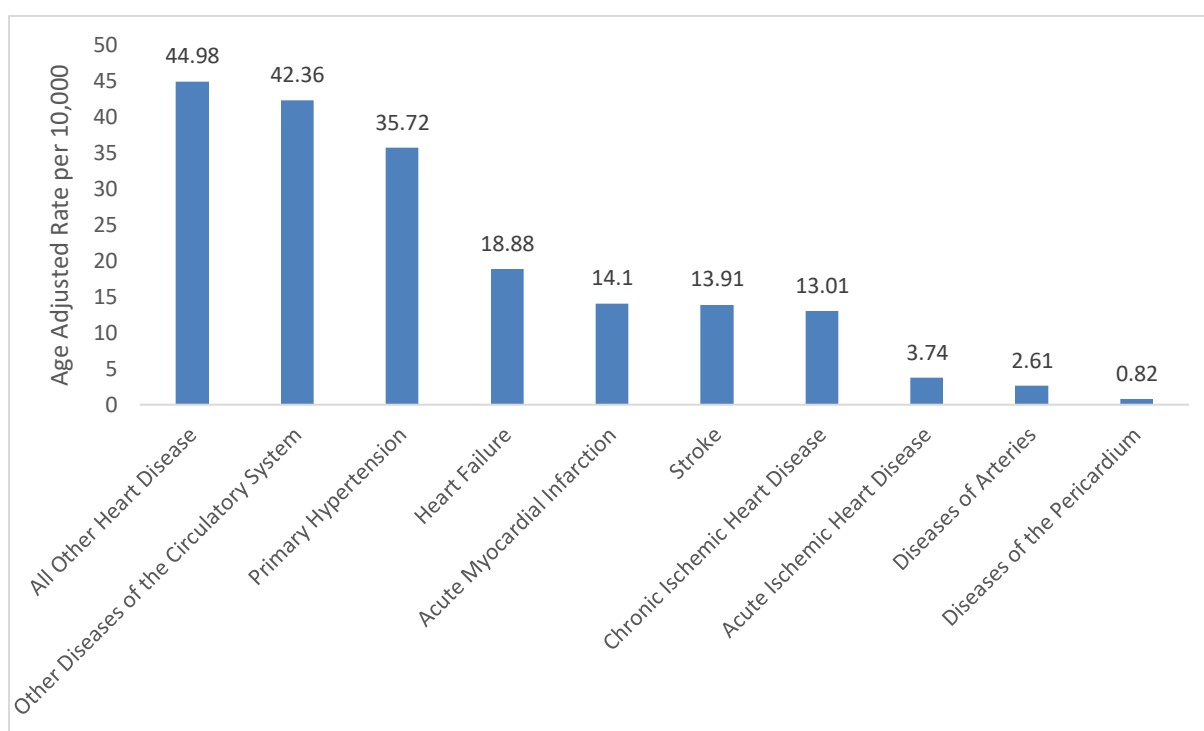


Chart 25 Diseases of the Circulatory System: Leading 10 causes of Hospitalization, Both Genders

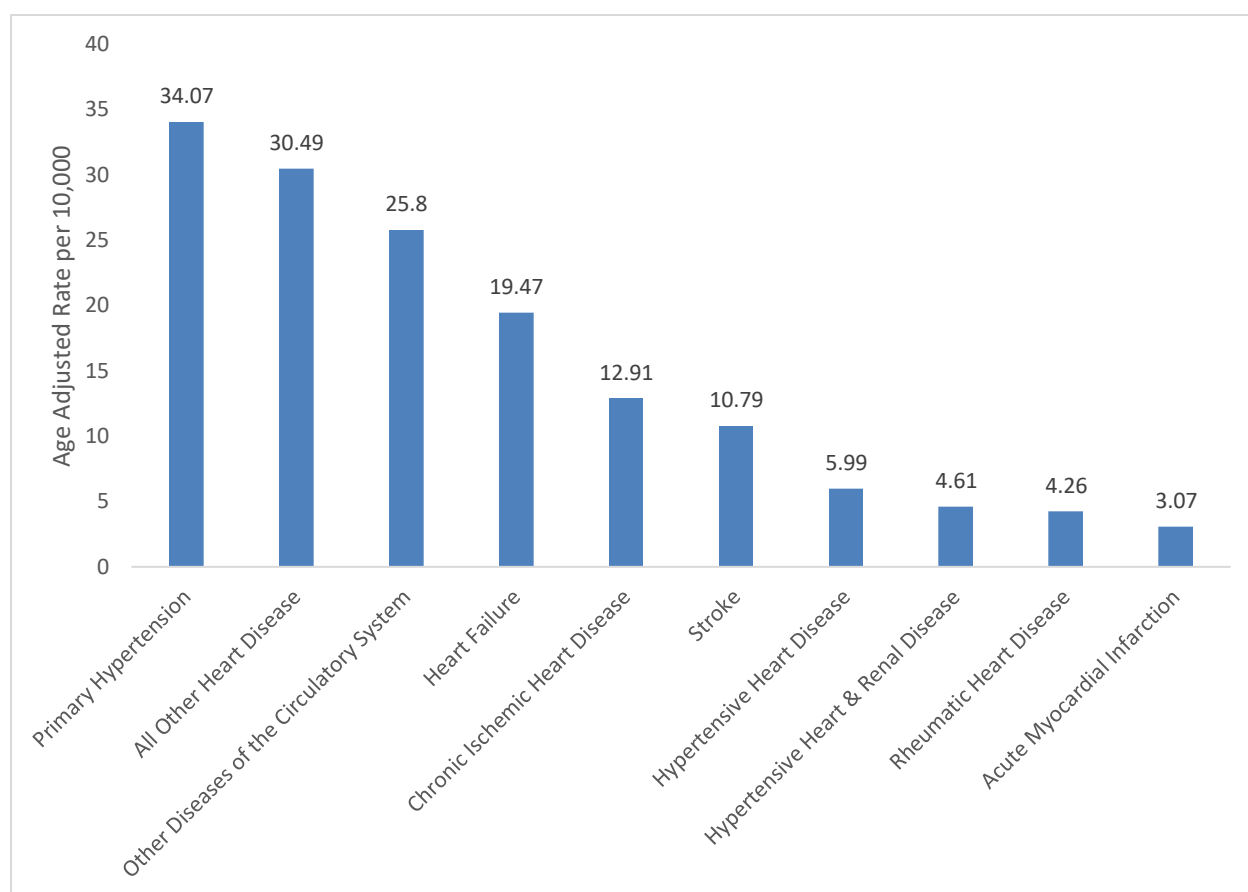


Chart 26 Diseases of the Circulatory System Hospitalization (1 of 3), by Gender

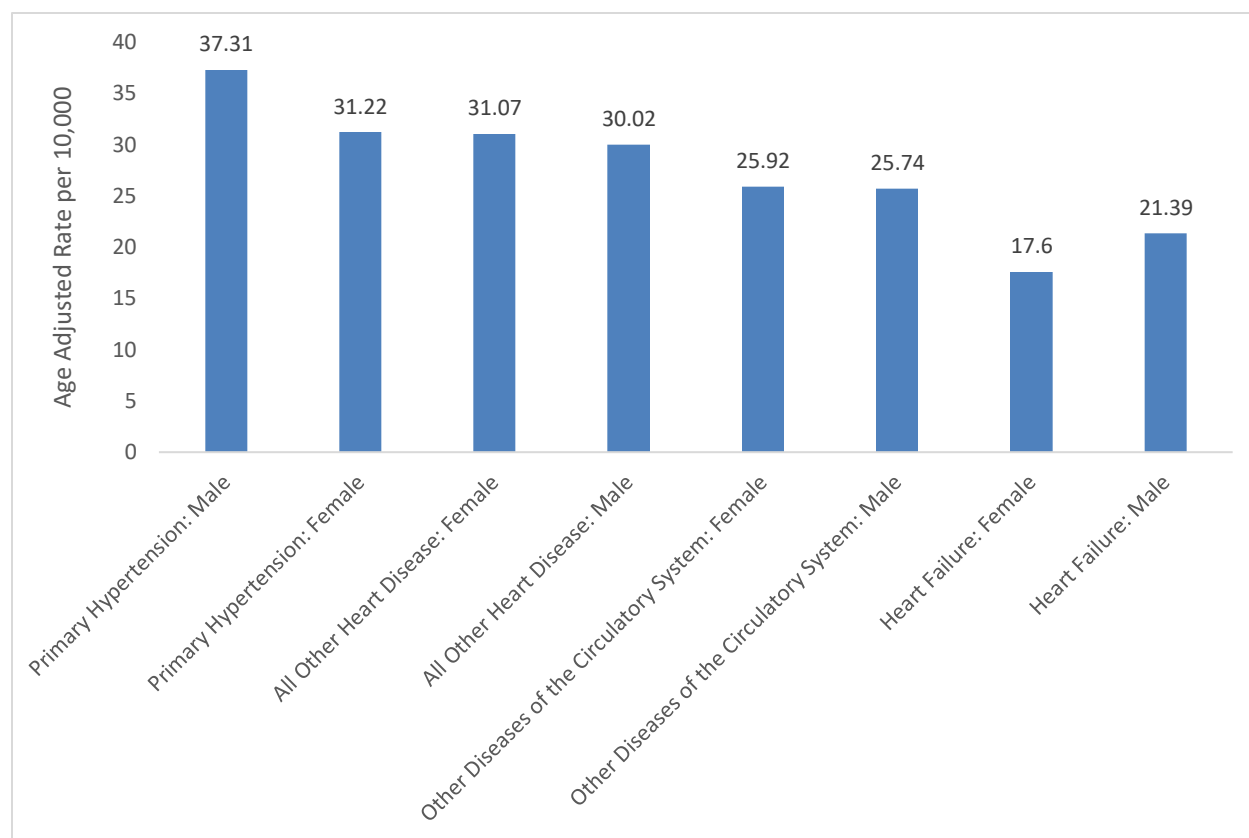


Chart 27 Diseases of the Circulatory System Hospitalization (2 of 3), by Gender

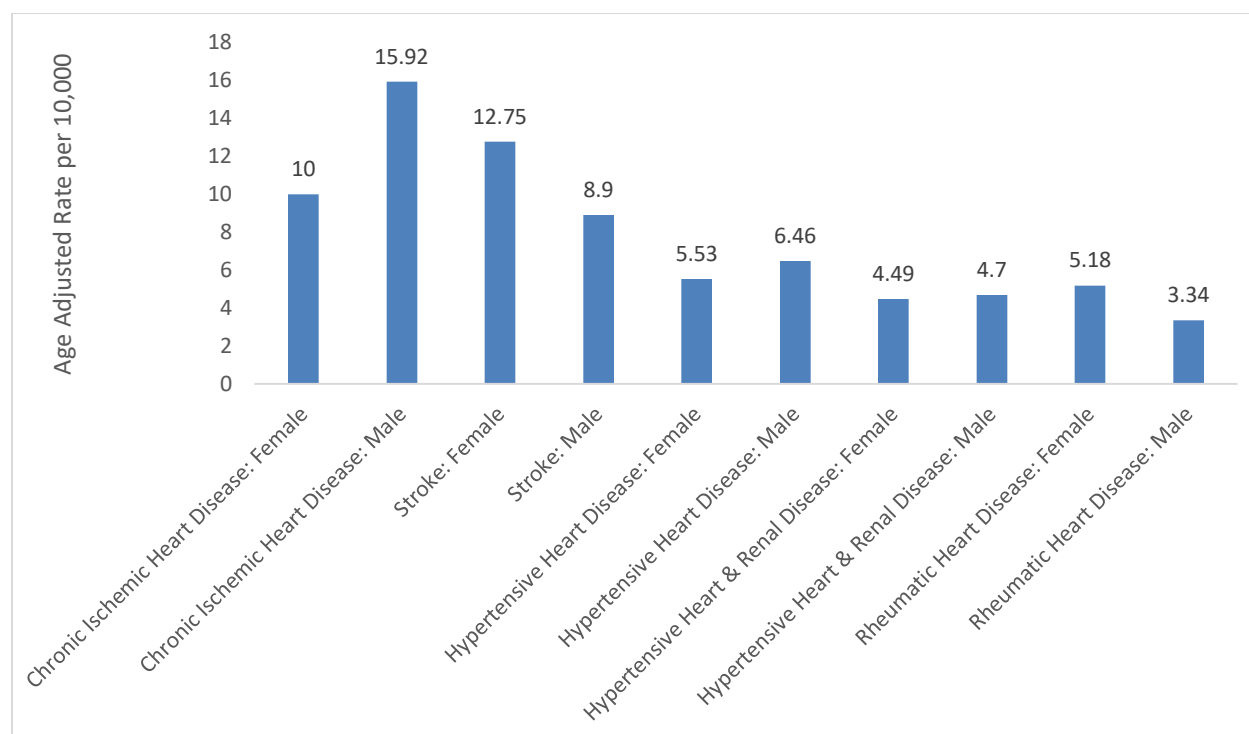


Chart 28 Diseases of the Circulatory System Hospitalization (3 of 3), by Gender

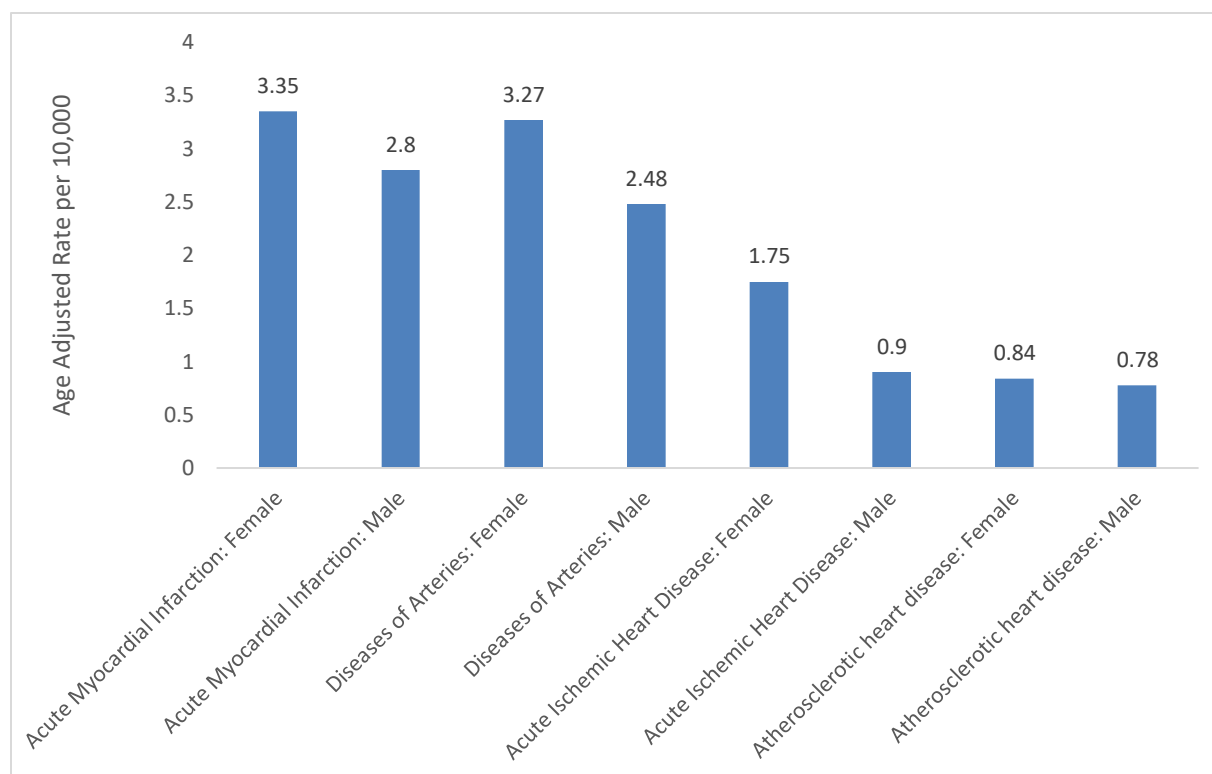


Table 17 Diseases of the Circulatory System All Health Care Visits, Both Genders

Health Condition	Count	Age Adjusted Rate	Movement
Rheumatic Heart Disease	399	22.45 (20.21, 24.69)	↔
Primary Hypertension	13,977	779.08 (765.95, 792.21)	↓
Hypertensive Heart Disease	444	27.19 (24.63, 29.75)	↑
Hypertensive Heart & Renal Disease	306	18.26 (16.19, 20.33)	↑
Chronic Ischemic Heart Disease	3,183	183.79 (177.31, 190.27)	↔
Acute Myocardial Infarction	720	42.76 (39.59, 45.93)	↑
Acute Ischemic Heart Disease	184	10.77 (9.19, 12.35)	↑
Atherosclerotic Cardiovascular Disease	0		
All Other Heart Disease	9,242	529.20 (518.23, 540.17)	↑
Pericarditis & Acute Myocarditis	85	4.62 (3.62, 5.62)	↔
Endocarditis	24	1.36 (0.80, 1.91)	↔
Heart Failure	2,167	129.86 (124.32, 135.40)	↑
Stroke	2,730	160.20 (154.10, 166.30)	↑
Atherosclerosis	799	46.44 (43.18, 49.71)	↑
Aortic Aneurysm	61	3.63 (2.70, 4.55)	↔
Diseases of the Artery	1,353	78.32 (74.08, 82.56)	↑
Other Diseases of the circulatory system	5,274	297.04 (288.89, 305.20)	↑

Table 18 Diseases of the Circulatory System ER Visits, Both Genders

Health Condition	Count	Age Adjusted Rate	Movement
Rheumatic Heart Disease	5	0.33 (0.040, 0.62)	↔
Primary Hypertension	627	35.72 (32.88, 38.56)	↓
Hypertensive Heart Disease	9	0.56 (0.19, 0.94)	↔
Hypertensive Heart & Renal Disease	10	0.60 (0.22, 0.98)	↔
Chronic Ischemic Heart Disease	224	13.01 (11.28, 14.73)	↓
Acute Myocardial Infarction	240	14.10 (12.29, 15.91)	↑
Acute Ischemic Heart Disease	63	3.74 (2.80, 4.67)	↔
Atherosclerotic Cardiovascular Disease	0		
All Other Heart Disease	778	44.98 (41.77, 48.20)	↑
Pericarditis & Acute Myocarditis	16	0.82 (0.41, 1.23)	↔
Endocarditis	NA		
Heart Failure	314	18.88 (16.77, 21.00)	↔
Stroke	235	13.91 (12.10, 15.72)	↔
Atherosclerosis	7	0.46 (0.12, 0.81)	↑
Aortic Aneurysm	5	0.31 (0.03, 0.58)	↔
Diseases of the Artery	46	2.61 (1.84, 3.37)	↔
Other Diseases of the circulatory system	765	42.36 (39.30, 45.42)	↔

Table 19 Diseases of the Circulatory System Hospitalizations, Both Genders

Health Condition	Count	Age Adjusted Rate	Movement
Rheumatic Heart Disease	69	4.26 (3.24, 5.28)	↔
Primary Hypertension	580	34.07 (31.26, 36.89)	↔
Hypertensive Heart Disease	94	5.99 (4.77, 7.22)	↑
Hypertensive Heart & Renal Disease	76	4.61 (3.56, 5.66)	↑
Chronic Ischemic Heart Disease	209	12.91 (11.14, 14.68)	↑
Acute Myocardial Infarction	47	3.07 (2.19, 3.96)	↑
Acute Ischemic Heart Disease	21	1.34 (0.76, 1.92)	↔
Atherosclerotic Cardiovascular Disease	0		
All Other Heart Disease	509	30.49 (27.81, 33.18)	↑
Pericarditis & Acute Myocarditis	8	0.44 (0.13, 0.76)	↔
Endocarditis	8	0.50 (0.15, 0.85)	↔
Heart Failure	314	19.47 (17.29, 21.65)	↑
Stroke	175	10.79 (9.17, 12.41)	↑
Atherosclerosis	13	0.79 (0.35, 1.23)	↔
Aortic Aneurysm	NA		
Diseases of the Artery	49	2.87 (2.06, 3.69)	↔
Other Diseases of the circulatory system	491	25.80 (23.38, 28.23)	↑

Table 19a Diseases of the Circulatory System Hospitalizations, by Gender

Health Condition	Female Count	Female Rate	Male Count	Male Rate
Rheumatic Heart Disease	42	5.18 (3.59, 6.77)	27	3.34 (2.07, 4.61)
Primary Hypertension	265	31.22 (27.40, 35.05)	315	37.31 (33.14, 41.48)
Hypertensive Heart Disease	43	5.53 (3.86, 7.20)	51	6.46 (4.67, 8.24)
Hypertensive Heart & Renal Disease	38	4.49 (3.04, 5.94)	38	4.70 (3.20, 6.20)
Chronic Ischemic Heart Disease	79	10.00 (7.77, 12.23)	130	15.92 (13.16, 18.68)
Acute Myocardial Infarction	25	3.35 (2.02, 4.67)	22	2.80 (1.62, 3.98)
All Other Heart Disease	260	31.07 (27.22, 34.91)	249	30.02 (26.25, 33.78)
Heart Failure	142	17.60 (14.66, 20.54)	172	21.39 (18.17, 24.61)
Stroke	101	12.75 (10.24, 15.27)	74	8.90 (6.85, 10.95)
Diseases of the Artery	28	3.27 (2.04, 4.50)	21	2.48 (1.41, 3.55)

Other Diseases of the circulatory system	231	25.92 (22.50, 29.34)	220	25.74 (22.29, 29.18)
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Diseases of the respiratory system

Chart 29 Diseases of the Respiratory System, ER Visits

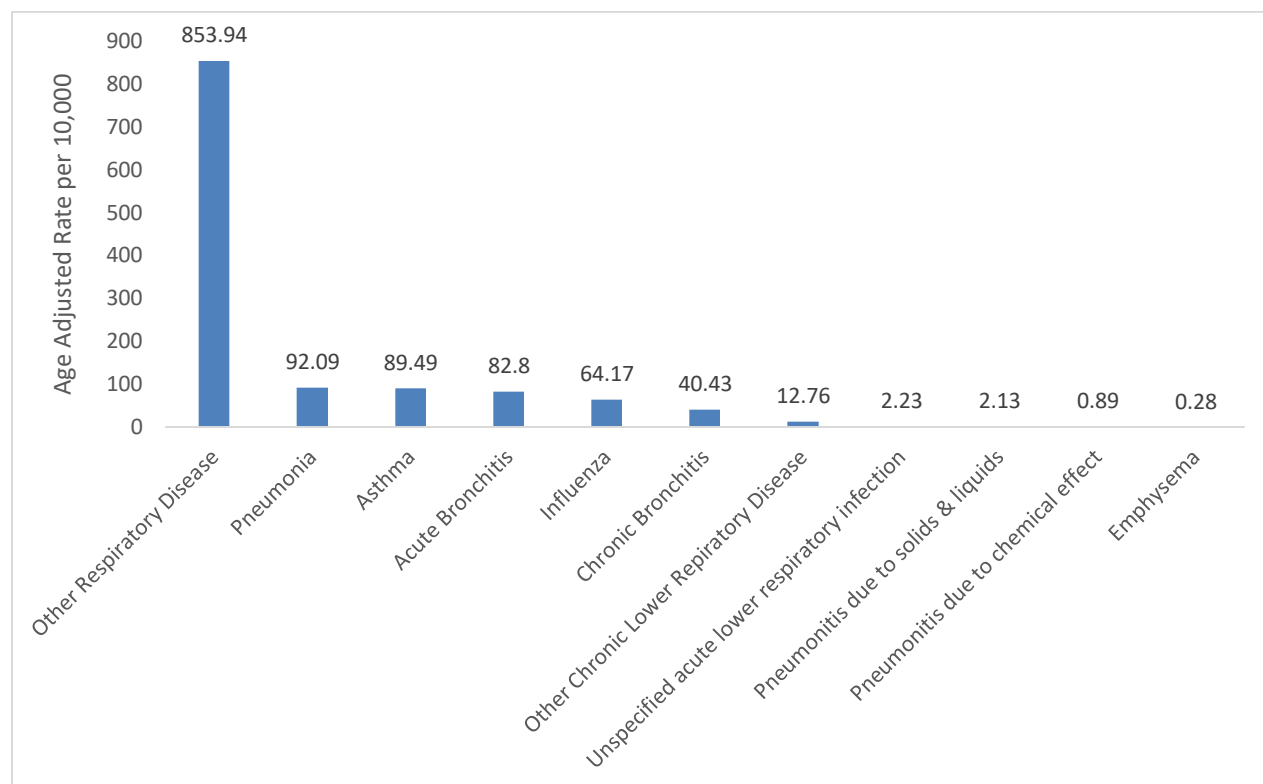


Chart 30 Diseases of the Respiratory Systems, Hospitalization

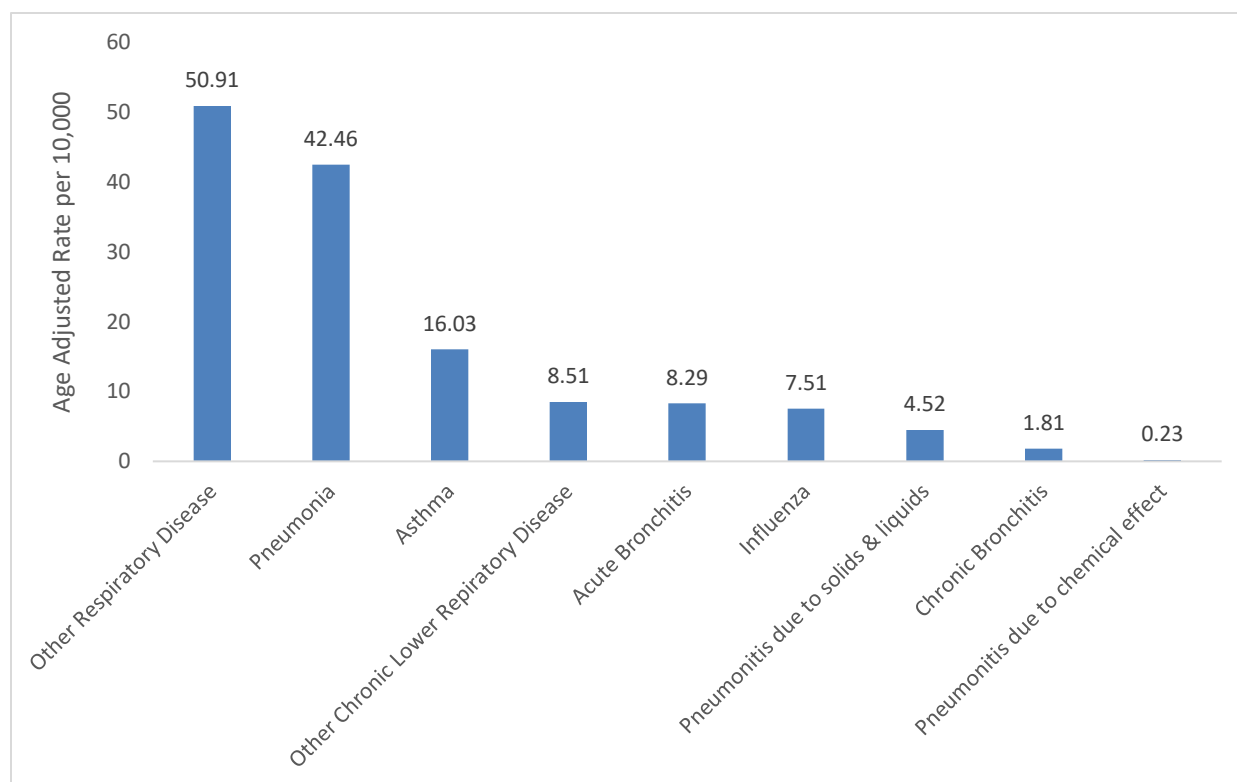


Chart 31 Respiratory Diseases Hospitalization (1 of 2), by Gender

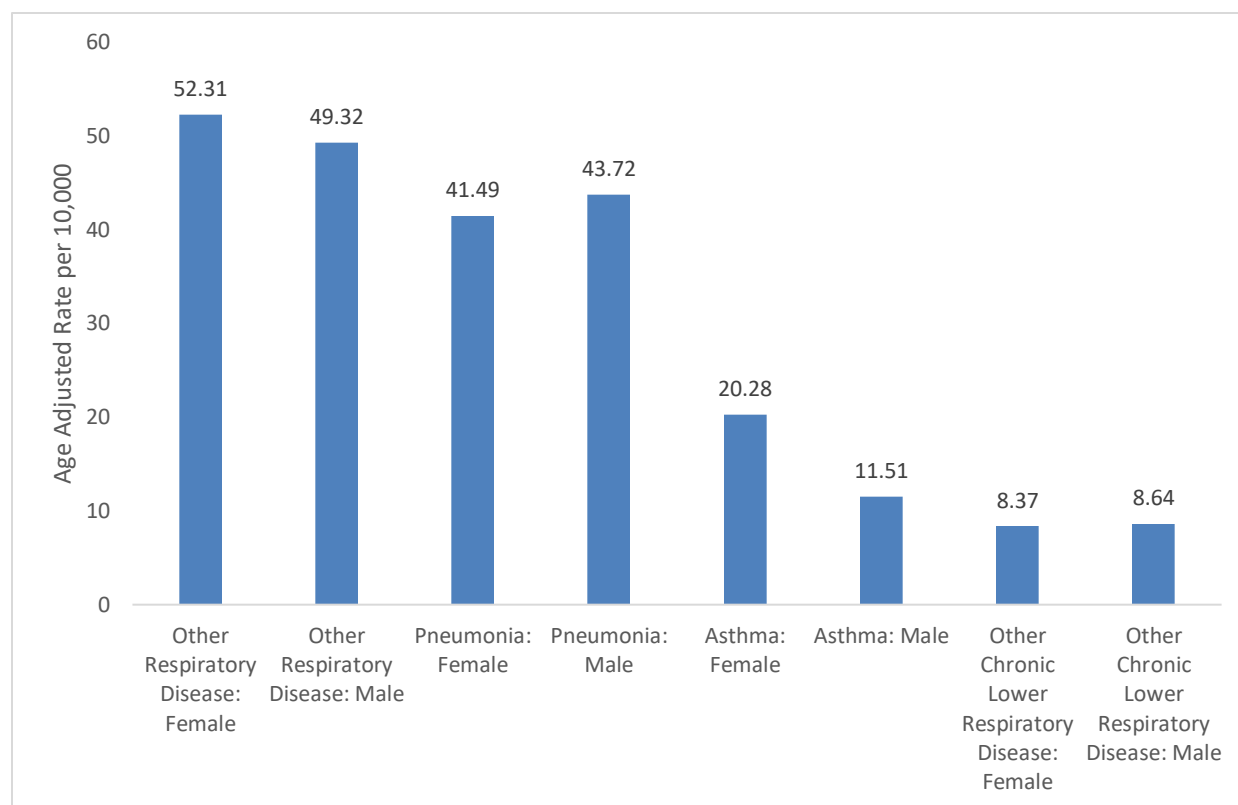


Chart 32 Respiratory Diseases Hospitalization (2 of 2), by Gender

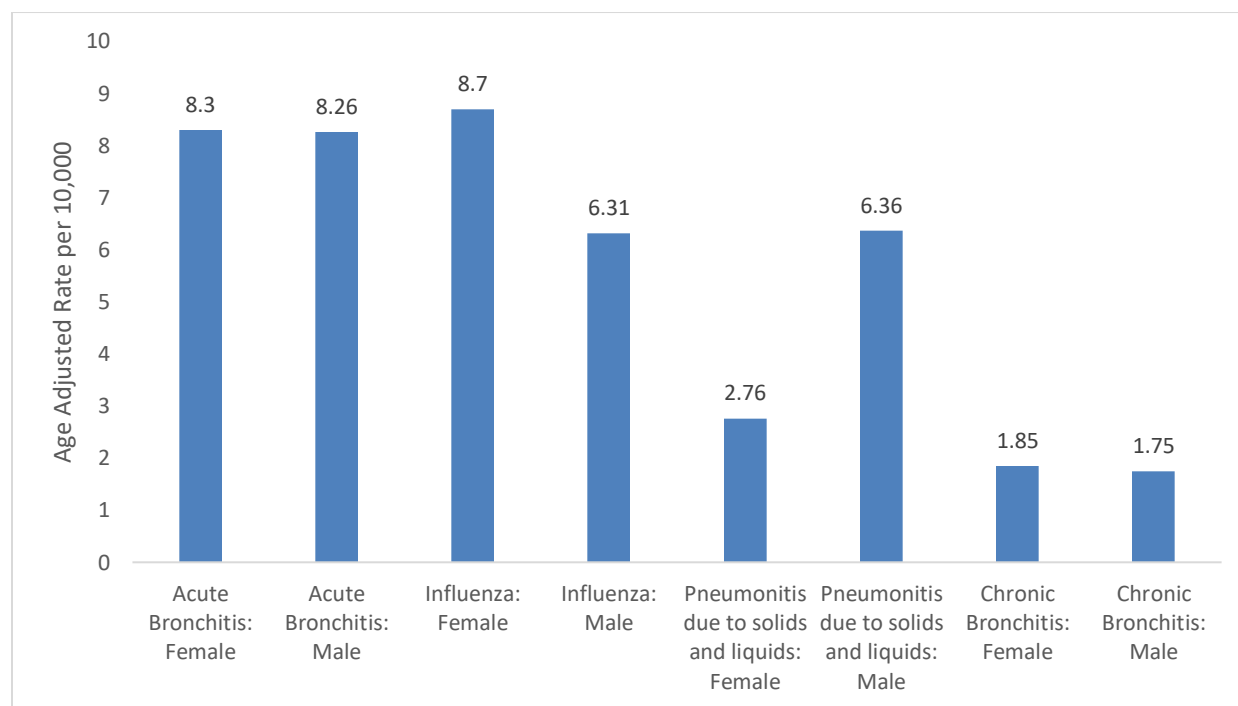


Table 20 Diseases of the Respiratory System All Health Care Visits, Both Genders

Health Condition	Count	Age Adjusted Rate	Movement
Other Respiratory Diseases	84,885	4259.55 (4220.27, 4278.83)	↑
Influenza	3,475	171.25 (165.41, 177.08)	↑
Pneumonia	5,495	298.40 (290.32, 306.47)	↑
Acute Bronchitis	4,875	242.24 (235.28, 249.20)	↑
Unspecified Acute Lower Respiratory Infection	442	22.92 (20.74, 25.11)	↑
Chronic Bronchitis	3,017	163.55 (157.60, 169.51)	↓
Emphysema	59	3.61 (2.67, 4.54)	↔
Other Chronic Lower Respiratory Infection	1,201	71.86 (67.73, 75.98)	↑
Asthma	11,607	585.62 (574.73, 596.52)	↔
Pneumoconiosis with chemical effect	180	10.82 (9.22, 12.43)	↔
Pneumonitis due to solids and liquids	203	11.97 (10.30, 13.65)	↑

Table 21 Diseases of the Respiratory System ER Visits, Both Genders

Health Condition	Count	Age Adjusted Rate	Movement
Other Respiratory Diseases	17,184	853.94 (840.85, 867.03)	↑
Influenza	1,297	64.17 (60.59, 67.75)	↑
Pneumonia	1,679	92.09 (87.59, 96.60)	↑
Acute Bronchitis	1,642	82.80 (78.69, 86.90)	↑
Unspecified Acute Lower Respiratory Infection	41	2.23 (1.53, 2.93)	↔
Chronic Bronchitis	749	40.43 (37.47, 43.38)	↓
Emphysema	5	0.28 (0.03, 0.52)	↔
Other Chronic Lower Respiratory Infection	212	12.76 (11.01, 14.50)	↑
Asthma	1,768	89.49 (85.22, 93.76)	↓
Pneumoconiosis with chemical effect	14	0.89 (0.42, 1.36)	↔
Pneumonitis due to solids and liquids	38	2.13 (1.44, 2.82)	↔

Table 22 Diseases of the Respiratory System Hospitalizations, Both Genders

Health Condition	Count	Age Adjusted Rate	Movement
Other Respiratory Diseases	871	50.91 (47.47, 54.35)	↑
Influenza	134	7.51 (6.21, 8.80)	↑
Pneumonia	744	42.46 (39.34, 45.57)	↑
Acute Bronchitis	190	8.29 (7.10, 9.49)	↑
Unspecified Acute Lower Respiratory Infection	NA	NA	
Chronic Bronchitis	30	1.81 (1.15, 2.46)	↔
Emphysema	NA	NA	
Other Chronic Lower Respiratory Infection	136	8.51 (7.06, 9.96)	↑
Asthma	307	16.03 (14.19, 17.86)	↑
Pneumoconiosis with chemical effect	NA	NA	
Pneumonitis due to solids and liquids	76	4.52 (3.49, 5.55)	↑

Table 22a Diseases of the Respiratory System Hospitalizations, by Gender

Health Condition	Female Count	Female Rate	Male Count	Male Rate
Other Respiratory Diseases	453	52.31 (47.39, 57.22)	418	49.32 (44.52, 54.12)
Influenza	78	8.70 (6.72, 10.68)	56	6.31 (4.63, 7.99)
Pneumonia	362	41.49 (37.12, 45.87)	382	43.72 (39.27, 48.17)
Acute Bronchitis	99	8.30 (6.64, 9.96)	91	8.26 (6.54, 9.97)
Chronic Bronchitis	16	1.85 (0.92, 2.77)	14	1.75 (0.82, 2.67)
Other Chronic Lower Respiratory Infection	67	8.37 (6.33, 10.41)	69	8.64 (6.59, 10.69)
Asthma	196	20.28 (17.37, 23.19)	111	11.51 (9.33, 13.69)
Pneumonitis due to solids and liquids	23	2.76 (1.61, 3.91)	53	6.36 (4.63, 8.09)

Diseases of the digestive system

Chart 33 Diseases of the Digestive System ER Visits, Both Genders

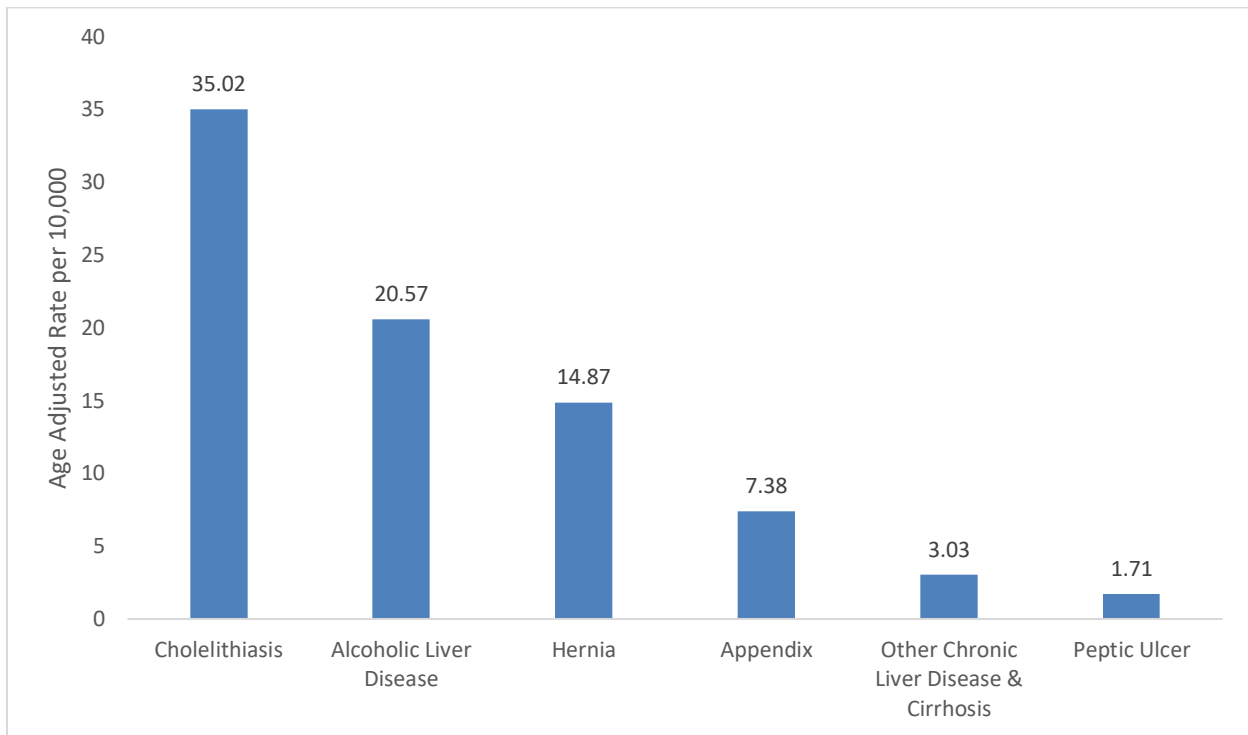


Chart 34 Diseases of the Digestive System Hospitalization, Both Genders

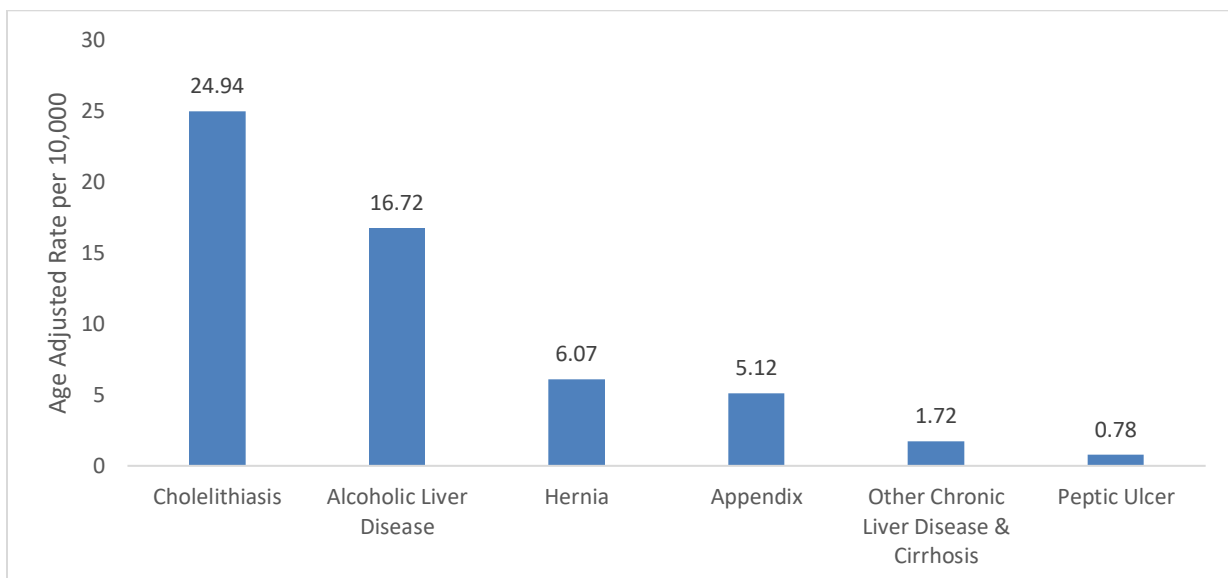


Chart 35 Diseases of the Digestive System Hospitalization, by Gender

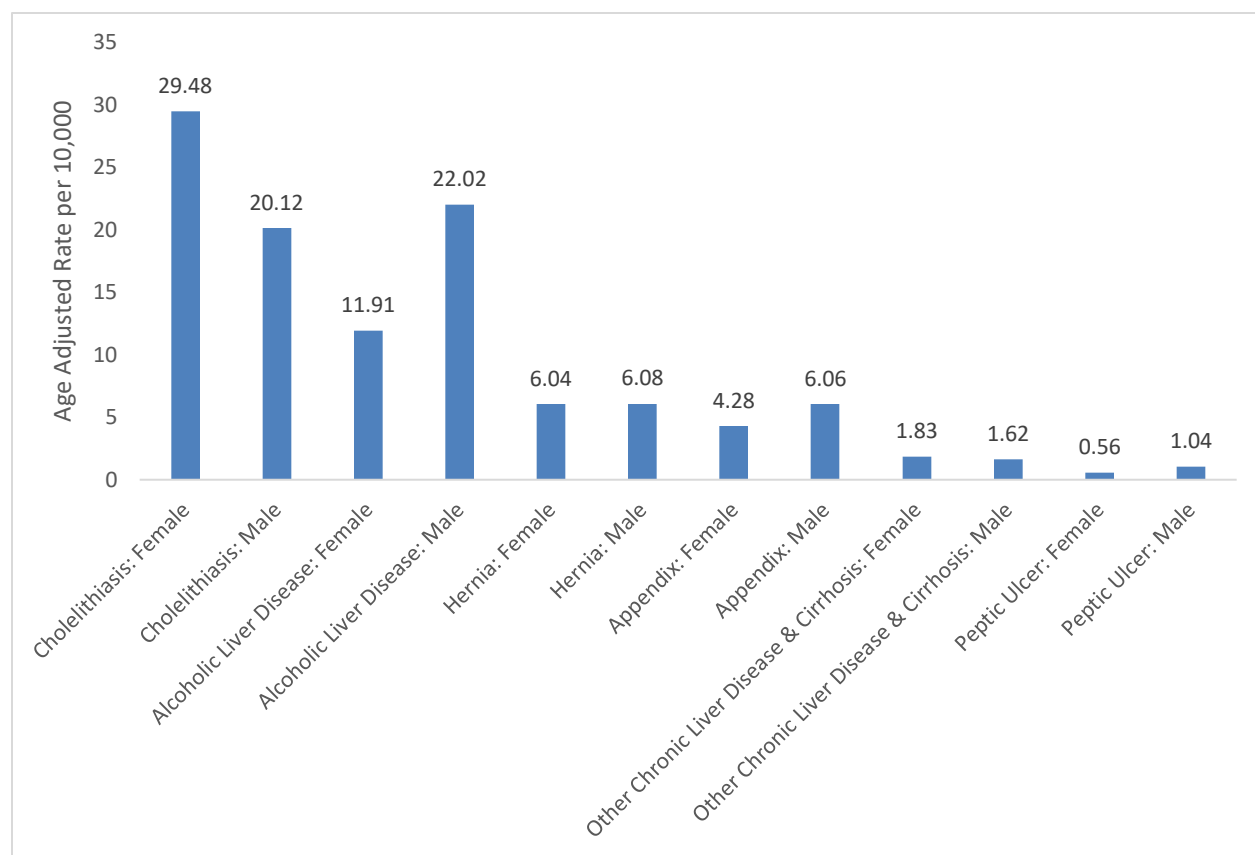


Table 23 Diseases of the Digestive System All Health Care Visits, Both Genders

Health Condition	Count	Age Adjusted Rate	Movement
Peptic Ulcer	474	25.85 (23.48, 28.21)	↓
Diseases of Appendix	551	26.72 (24.44, 29.00)	↑
Hernia	2,973	164.7 (158.67, 170.72)	↑
Alcohol Liver Disease	1,304	72.73 (68.71, 76.75)	↔
Other Chronic Liver Disease & Cirrhosis	522	28.60 (26.11, 31.09)	↔
Cholelithiasis and other disorders of the gallbladder	4,366	237.69 (230.49, 244.90)	↑

Table 24 Diseases of the Digestive System ER Visits, Both Genders

Health Condition	Count	Age Adjusted Rate	Movement
Peptic Ulcer	33	1.71 (1.11, 2.30)	↔
Diseases of Appendix	181	7.38 (6.15, 8.61)	↔
Hernia	280	14.87 (13.02, 16.72)	↔
Alcohol Liver Disease	338	20.57 (18.44, 22.70)	↓
Other Chronic Liver Disease & Cirrhosis	52	3.03 (2.19, 3.86)	↔
Cholelithiasis and other disorders of the gallbladder	785	35.02 (32.17, 37.87)	↓

Table 25 Diseases of the Digestive System Hospitalizations, Both Genders

Health Condition	Count	Age Adjusted Rate	Movement
Peptic Ulcer	15	0.78 (0.38, 1.18)	↔
Diseases of Appendix	105	5.12 (4.12, 6.12)	↔
Hernia	103	6.07 (4.88, 7.26)	↔
Alcohol Liver Disease	299	16.72 (14.79, 18.64)	↔
Other Chronic Liver Disease & Cirrhosis	31	1.72 (1.11, 2.34)	↔
Cholelithiasis and other disorders of the gallbladder	454	24.94 (22.60, 27.28)	↔

Table 25a Diseases of the Digestive System Hospitalizations, by Gender

Health Condition	Female Count	Female Rate	Male Count	Male Rate
Peptic Ulcer	5	0.56 (0.06, 1.05)	10	1.04 (0.39, 1.70)
Diseases of Appendix	44	4.28 (2.98, 5.59)	61	6.06 (4.51, 7.61)
Hernia	53	6.04 (4.38, 7.70)	50	6.08 (4.38, 7.78)
Alcohol Liver Disease	109	11.91 (9.63, 14.19)	190	22.02 (18.84, 25.19)
Other Chronic Liver Disease & Cirrhosis	17	1.83 (0.94, 2.71)	14	1.62 (0.76, 2.48)
Cholelithiasis and other disorders of the gallbladder	277	29.48 (25.93, 33.04)	177	20.12 (17.11, 23.13)

Diseases of the genitourinary system

Chart 36 Diseases of the Genitourinary System ER Visits, Both Genders

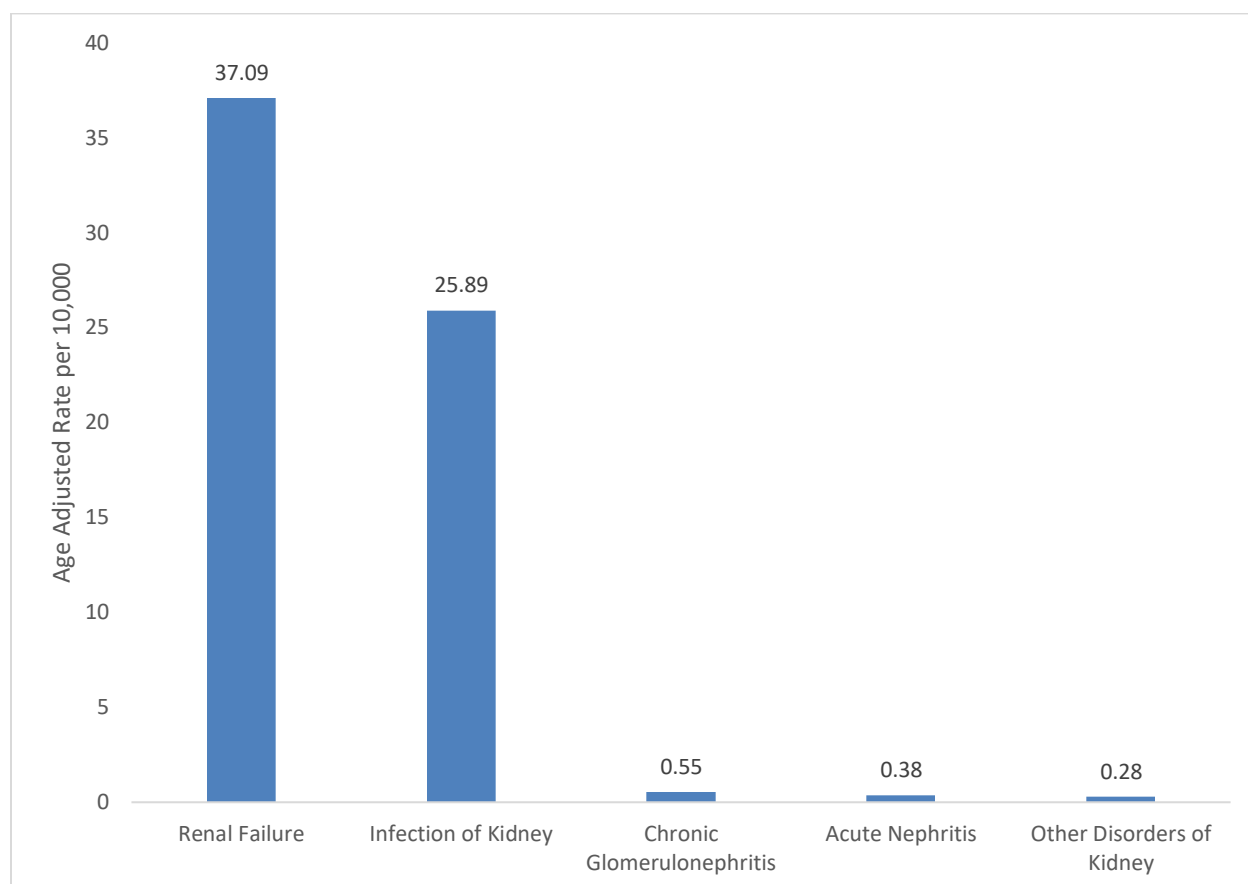
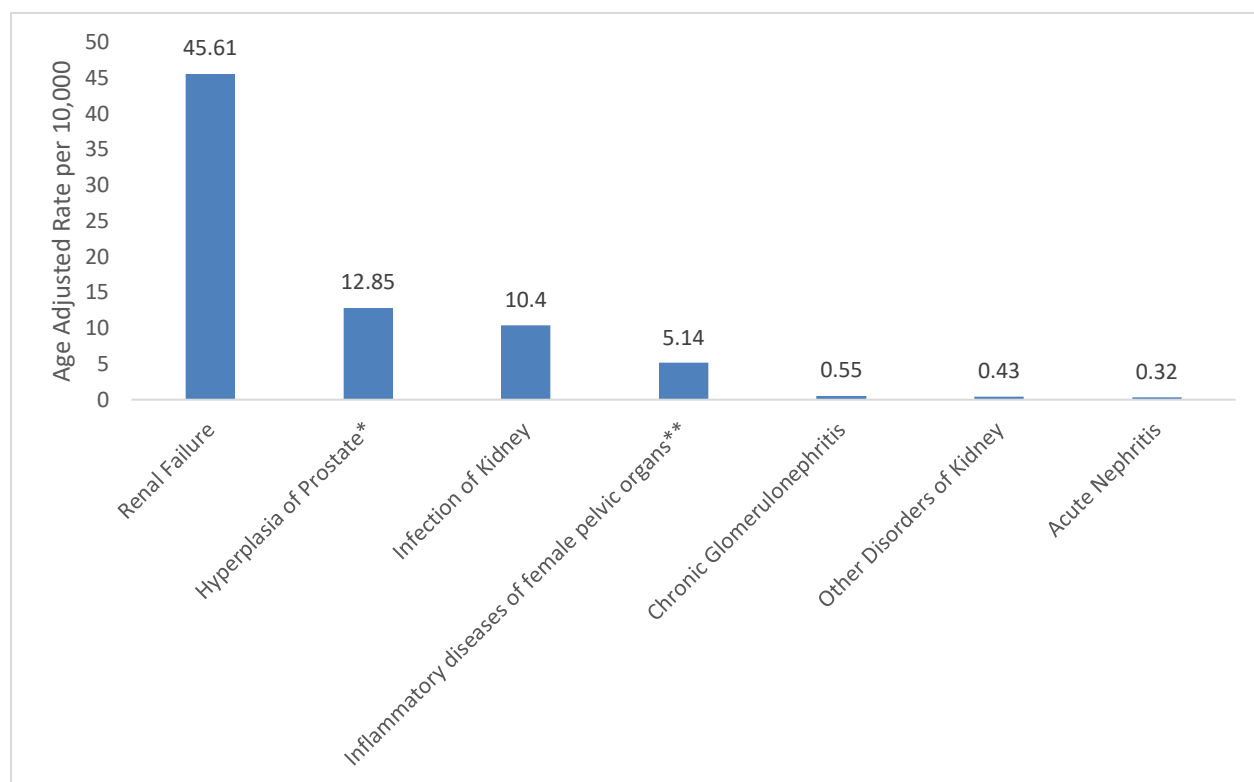


Chart 37 Diseases of the Genitourinary System Hospitalization, Both Genders



*Males only included in the denominator

**Females only included in the denominator

Chart 38 Diseases of the Genitourinary System Hospitalization, by Gender

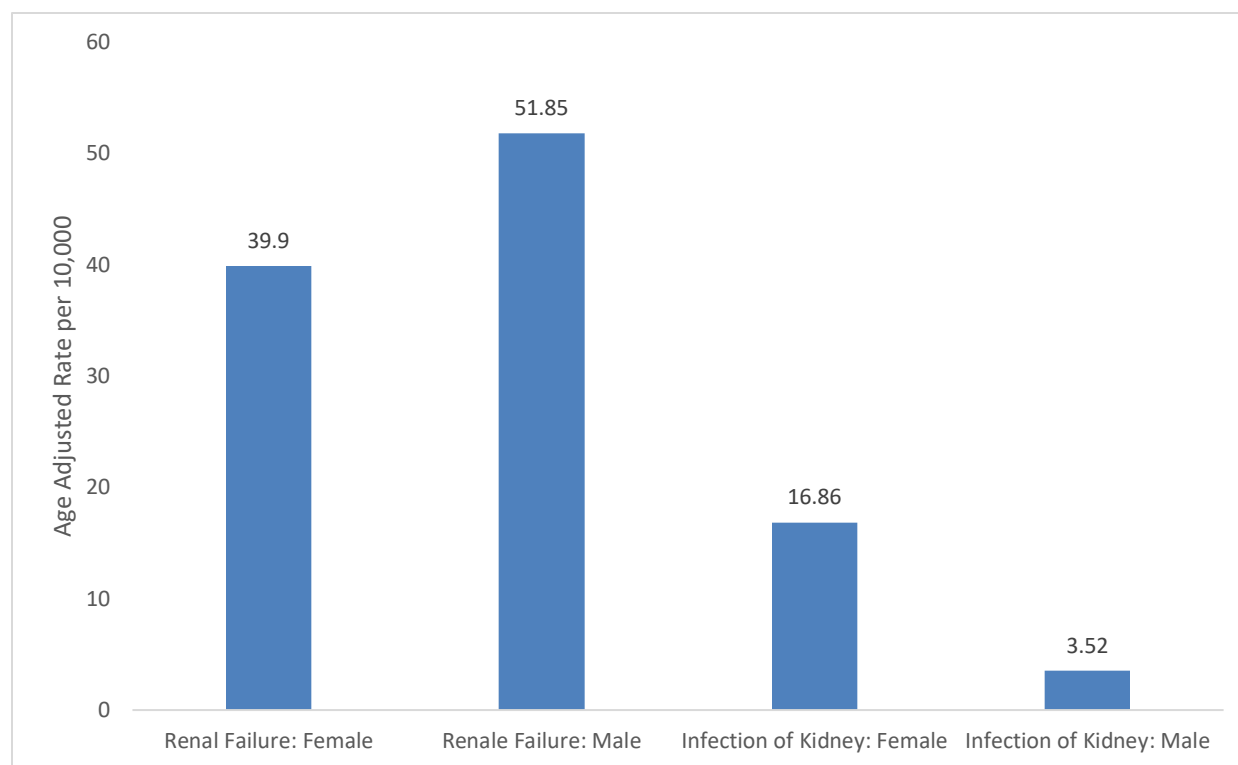


Table 26 Diseases of the Genitourinary System All Health Care Visits, Both Genders

Health Condition	Count	Age Adjusted Rate	Movement
Acute Nephritis	117	6.34 (5.17, 7.50)	↔
Chronic Glomerulonephritis	222	13.98 (12.25, 15.72)	↔
Infections of Kidney	1,060	74.34 (70.33, 78.35)	↓
Renal Failure	5,035	331.16 (322.48, 339.85)	↓
Other Disorders of Kidney	190	11.76 (10.14, 13.37)	↔
Hyperplasia of Prostate	2,116	244.57 (233.90, 255.24)	↔
Inflammatory diseases of female pelvic organs	3,130	345.74 (333.70, 357.77)	↑

Table 27 Diseases of the Genitourinary System ER Visits, Both Genders

Health Condition	Count	Age Adjusted Rate	Movement
Acute Nephritis	7	0.38 (0.09, 0.66)	↔
Chronic Glomerulonephritis	10	0.55 (0.20, 0.90)	↔
Infections of Kidney	480	25.89 (23.53, 28.26)	↔
Renal Failure	644	37.09 (34.18, 40.00)	↔
Other Disorders of Kidney	5	0.28 (0.03, 0.53)	NA
Hyperplasia of Prostate	75	8.96 (6.91, 11.01)	↔
Inflammatory diseases of female pelvic organs	301	30.50 (26.96, 34.04)	↔

Table 28 Diseases of the Genitourinary System Hospitalizations, Both Genders

Health Condition	Count	Age Adjusted Rate	Movement
Acute Nephritis	6	0.32 (0.06, 0.59)	NA
Chronic Glomerulonephritis	10	0.55 (0.20, 0.90)	↔
Infections of Kidney	185	10.40 (8.87, 11.93)	↑
Renal Failure	772	45.61 (42.34, 48.88)	↑
Other Disorders of Kidney	7	0.43 (0.11, 0.75)	NA
Hyperplasia of Prostate	102	12.85 (10.34, 15.36)	↔
Inflammatory diseases of female pelvic organs	44	5.14 (3.59, 6.69)	↔

Table 28a Diseases of the Genitourinary System Hospitalizations, by Gender

Health Condition	Female Count	Female Rate	Male Count	Male Rate
Infections of Kidney	155	16.86 (14.14, 19.58)	30	3.52 (2.25, 4.80)
Renal Failure	335	39.90 (35.56, 44.24)	437	51.85 (46.92, 56.76)
Hyperplasia of Prostate	NA	NA	102	12.85 (10.34, 15.36)
Inflammatory diseases of female pelvic organs	44	5.14 (3.59, 6.69)	NA	NA

Pregnancy, childbirth and the puerperium

Chart 39 Pregnancy, childbirth and the puerperium ER Visits

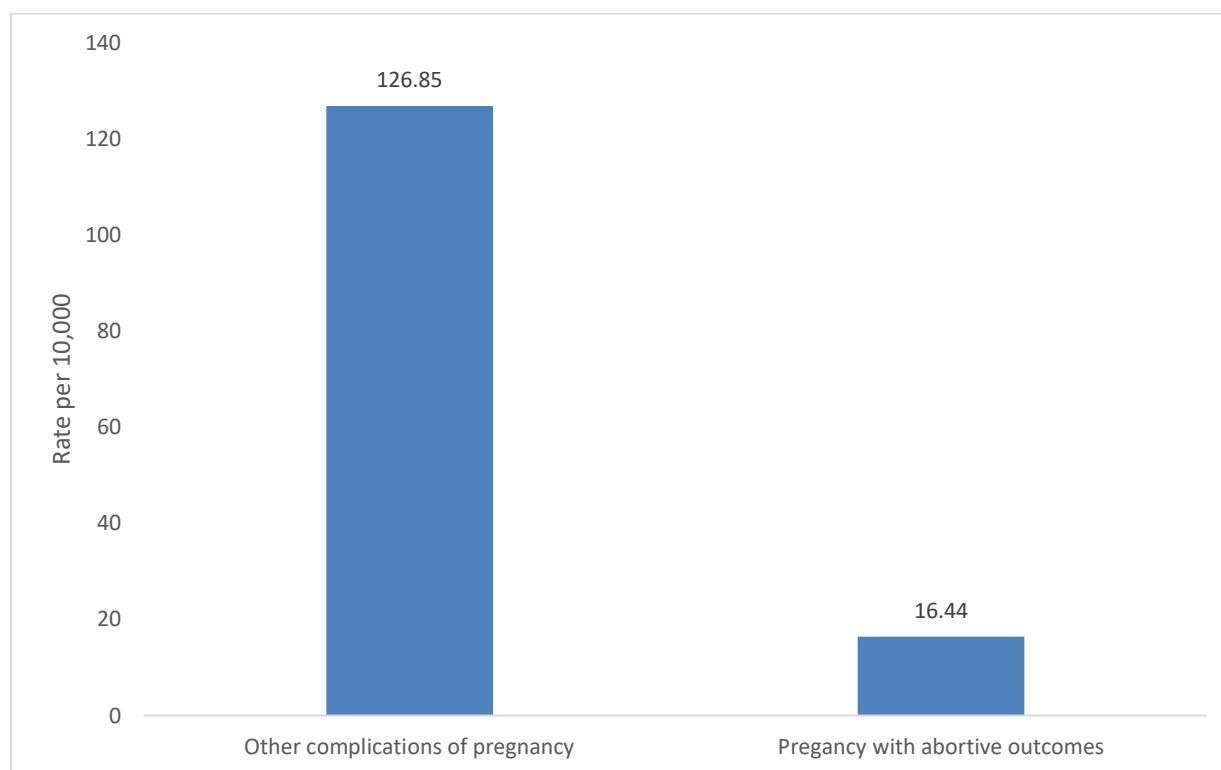
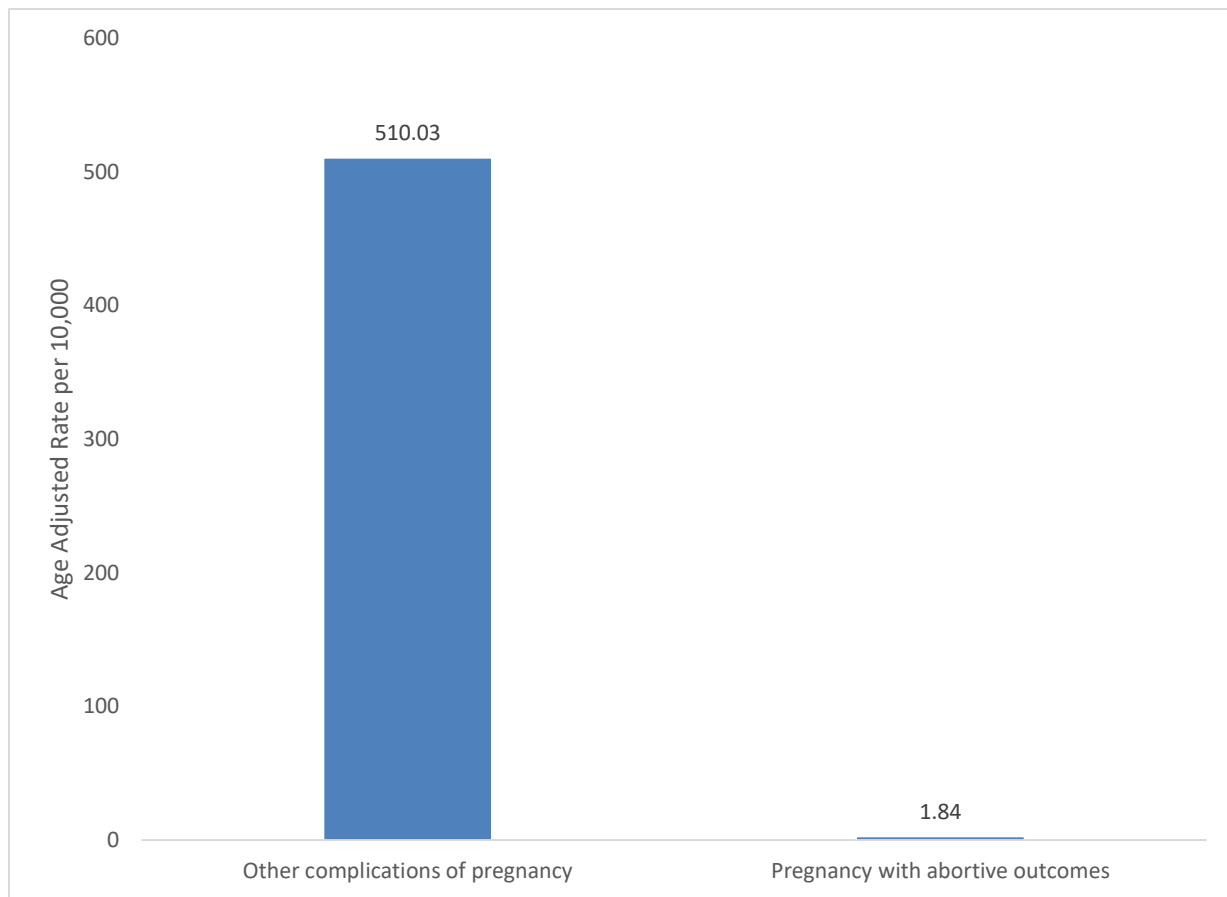


Chart 40 Pregnancy, childbirth and the puerperium Hospitalizations



The denominator for other pregnancy issues includes women up to age 69, and the denominator for abortive pregnancy is women ages 0-59. These age groups were used to best match denominators used by the State comparisons.

Table 29 Pregnancy, childbirth and the puerperium All Health Care Visits

Health Condition	Count	Age Adjusted Rate	Movement
Abortive Pregnancy	652	87.01 (81.04, 92.62)	NA
Other Pregnancy Issues	24,055	2815.10 (2782.36, 2847.84)	NA

Table 30 Pregnancy, childbirth and the puerperium ER Visits

Health Condition	Count	Age Adjusted Rate	Movement
Abortive Pregnancy	127	16.44 (14.03, 18.85)	NA
Other Pregnancy Issues	1,102	126.85 (119.95, 133.75)	NA

Table 31 Pregnancy, childbirth and the puerperium Hospitalizations

Health Condition	Count	Age Adjusted Rate	Movement
Abortive Pregnancy	14	1.84 (1.04, 2.64)	NA
Other Pregnancy Issues	4,463	510.03 (496.25, 523.81)	NA

Congenital malformations, deformations and chromosomal abnormalities

Chart 41 Congenital malformations, deformations and chromosomal abnormalities ER Visits, Both Genders

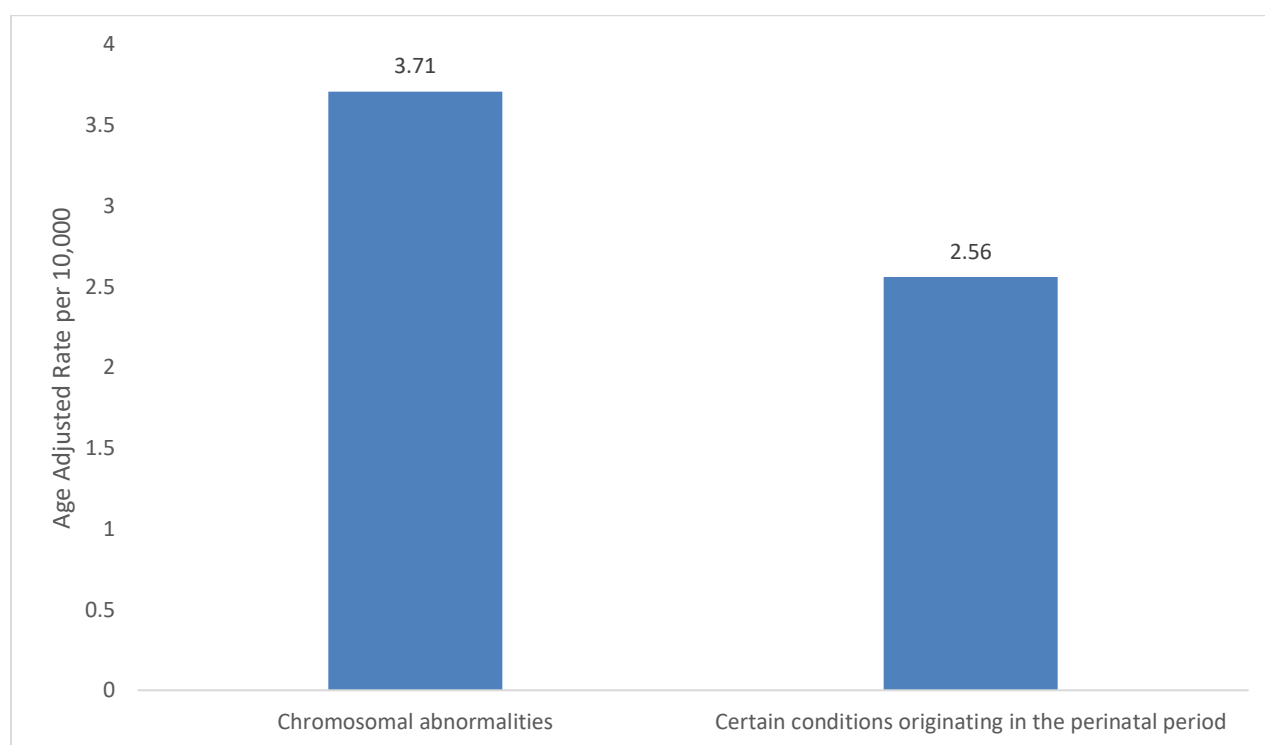


Chart 42 Congenital malformations, deformations and chromosomal abnormalities
Hospitalizations, Both Genders

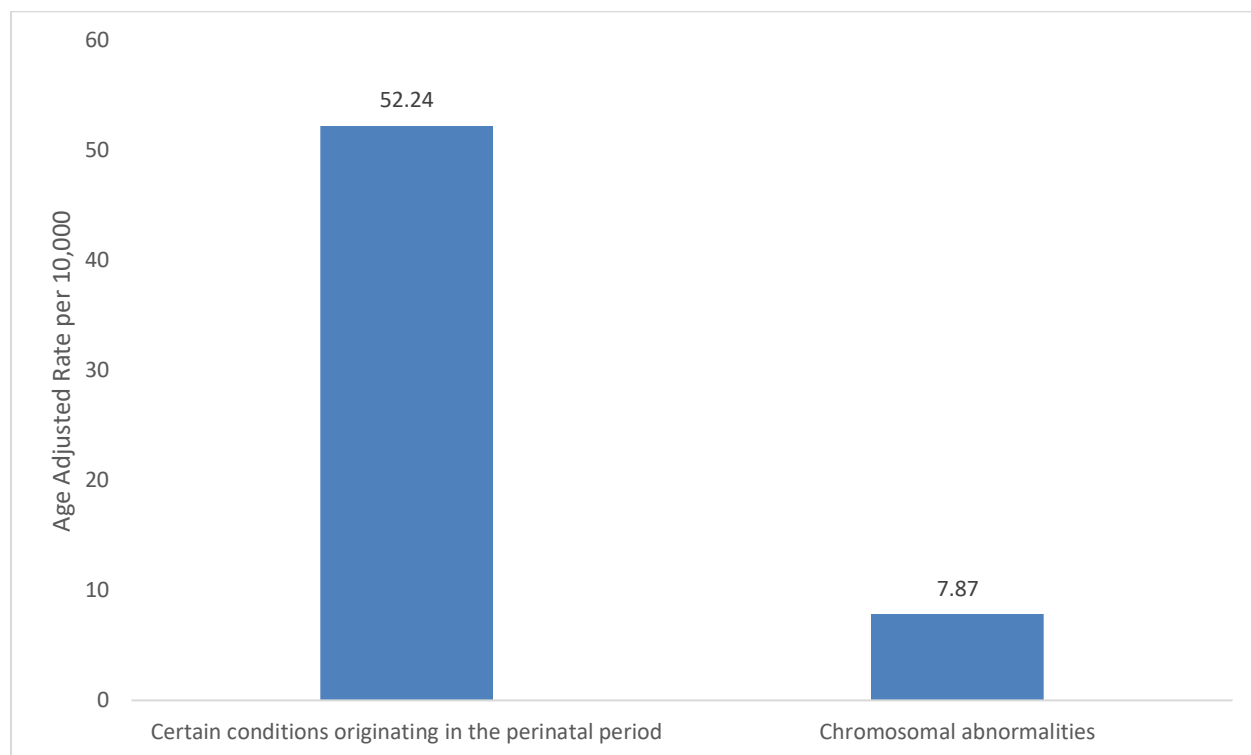


Chart 43 Congenital malformations, deformations & chromosomal abnormalities
Hospitalizations, by Gender

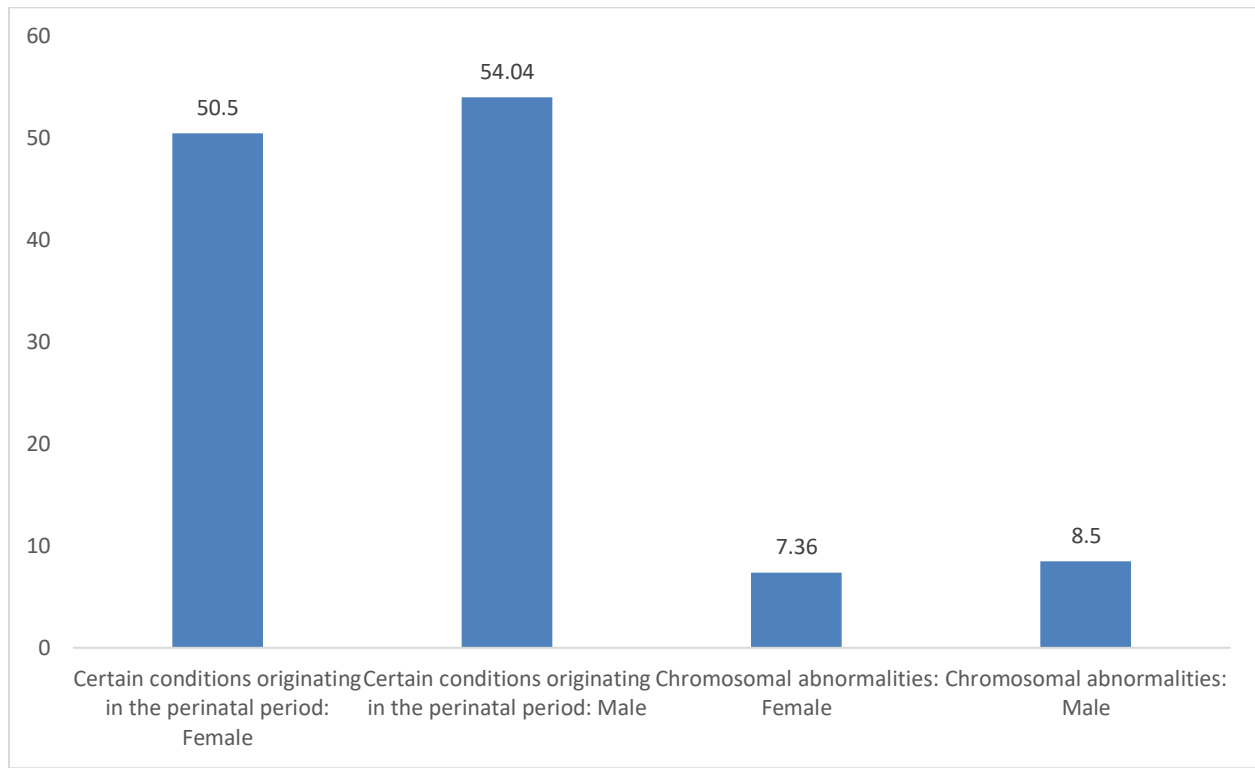


Table 32 Congenital malformations, deformations and chromosomal abnormalities All Health Care Visits, Both Genders

Health Condition	Count	Age Adjusted Rate	Movement
Certain conditions originating in the perinatal period	3,326	131.99 (125.6, 138.39)	↑
Chromosomal Abnormalities	3,510	172.46 (164.37, 180.56)	↑

Table 33 Congenital malformations, deformations and chromosomal abnormalities ER Visits, Both Genders

Health Condition	Count	Age Adjusted Rate	Movement
Certain conditions originating in the perinatal period	69	2.56 (1.65, 3.47)	↑
Chromosomal Abnormalities	79	3.71 (2.48, 4.95)	↔

Table 34 Congenital malformations, deformations and chromosomal abnormalities
Hospitalizations, Both Genders

Health Condition	Count	Age Adjusted Rate	Movement
Certain conditions originating in the perinatal period	1,263	52.24 (49.36, 55.13)	↑
Chromosomal Abnormalities	171	7.87 (6.67, 9.08)	↑

Table 34a Congenital malformations, deformations and chromosomal abnormalities
Hospitalizations, by Gender

Health Condition	Female Count	Female Rate	Male Count	Male Rate
Certain conditions originating in the perinatal period	639	50.50 (46.57, 54.43)	624	54.04 (49.81, 58.28)
Chromosomal Abnormalities	79	7.36 (5.69, 9.03)	92	8.50 (6.74, 10.26)

Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified

Chart 44 Symptoms, signs and abnormal lab findings ER Visits & Hospitalization, Both Genders

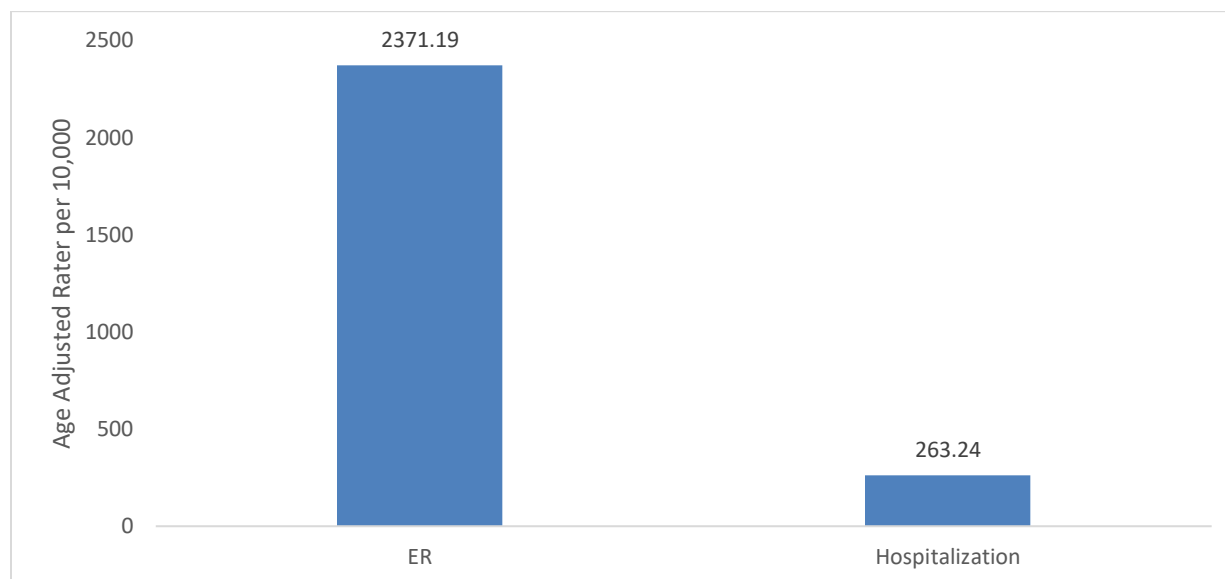


Chart 45 Symptoms, signs and abnormal lab findings Hospitalizations, by Gender

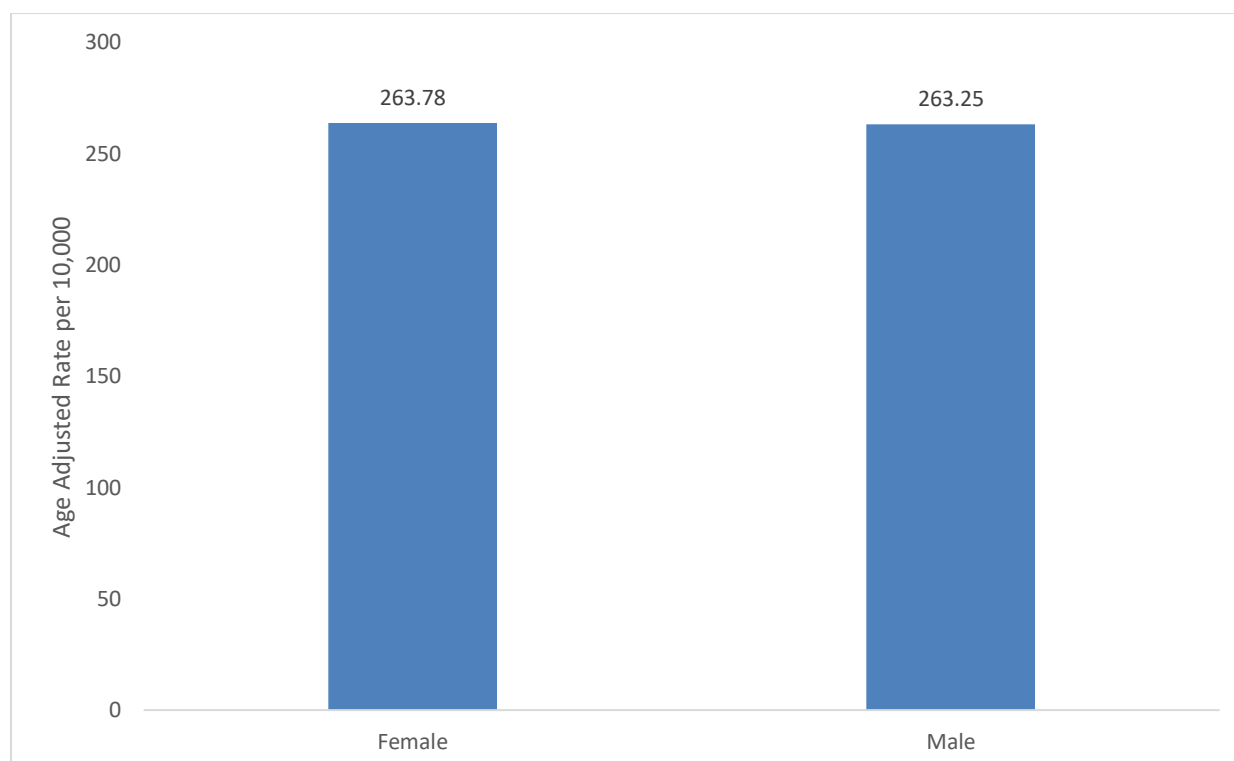


Table 35 Symptoms, signs and abnormal lab findings All Health Care Visits, Both Genders

Health Condition	Count	Age Adjusted Rate	Movement
Symptoms, Signs and Abnormal Lab Findings	198,204	10563.65 (10516.11, 10611.19)	↑

Table 36 Symptoms, signs and abnormal lab findings ER Visits, Both Genders

Health Condition	Count	Age Adjusted Rate	Movement
Symptoms, Signs and Abnormal Lab Findings	44,901	2371.19 (2348.71, 2393.25)	↑

Table 37 Symptoms, signs and abnormal lab findings Hospitalizations, Both Genders

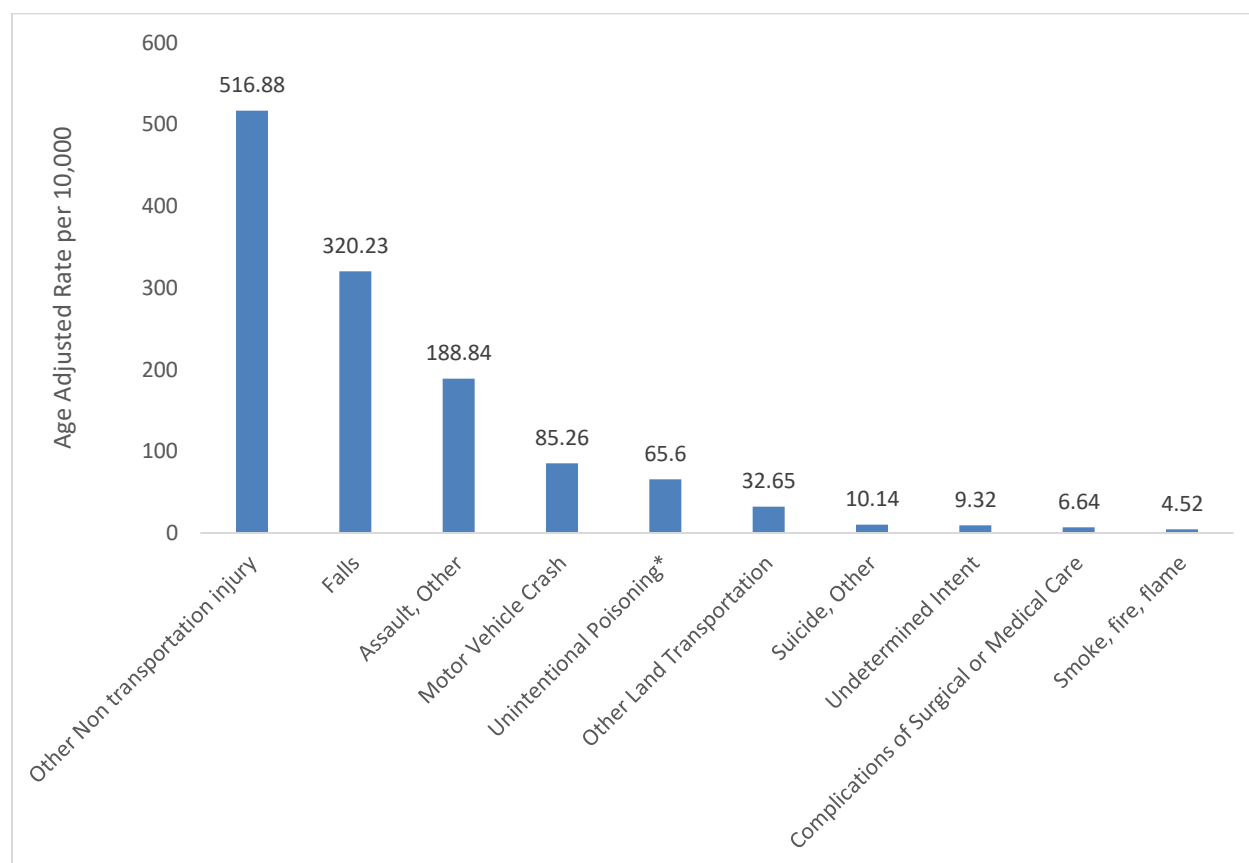
Health Condition	Count	Age Adjusted Rate	Movement
Symptoms, Signs and Abnormal Lab Findings	4,607	263.24 (255.49, 271.00)	↑

Table 37a Symptoms, signs and abnormal lab findings Hospitalizations, by Gender

Health Condition	Female Count	Female Rate	Male Count	Male Rate
Symptoms, Signs, and Abnormal Lab Findings	2,366	263.78 (252.82, 274.74)	2,271	263.25 (252.26, 274.24)

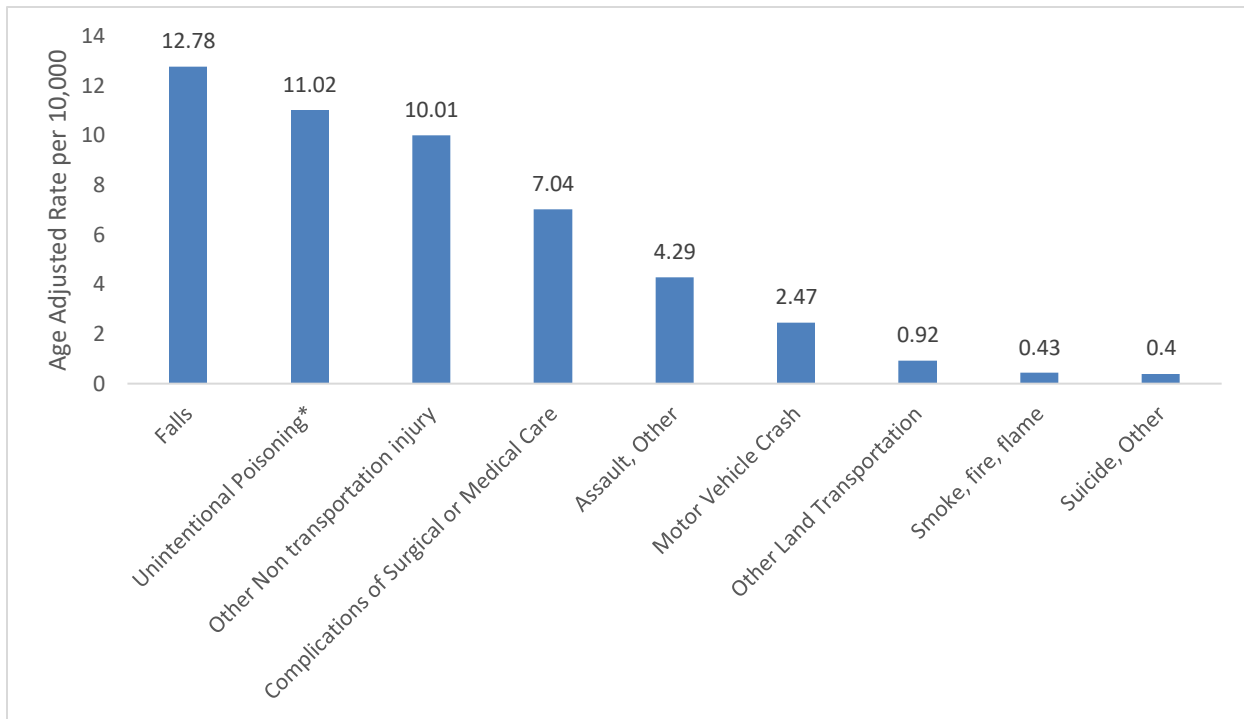
External causes of morbidity and mortality

Chart 46 External Cause of Injury: Leading 10 Causes ER Visits, Both Genders



*T Codes used for this calculation

Chart 47 External Cause of Injury: Leading Causes Hospitalization, Both Genders



*Calculated from T Codes

Chart 48 Unintentional Injury ER Visit, by Gender (1 of 2)

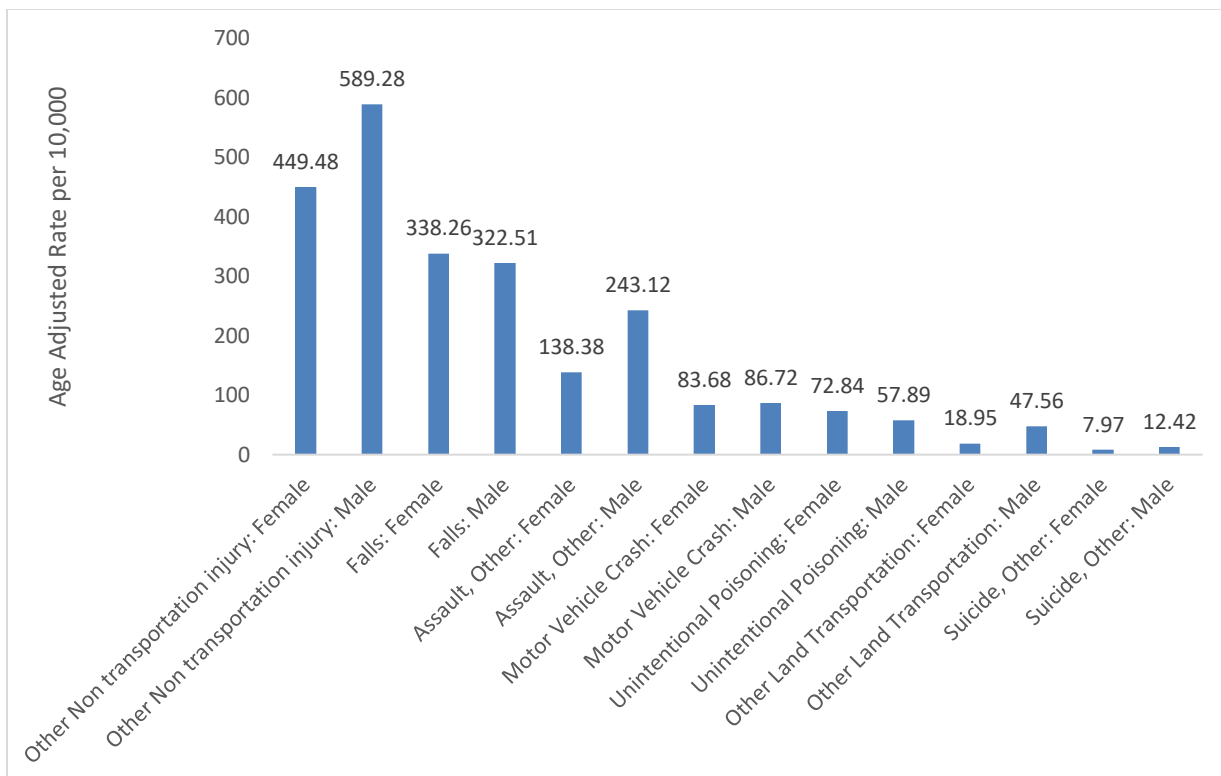


Chart 49 Intentional & Undetermined Intent ER Visit, by Gender (2 of 2)

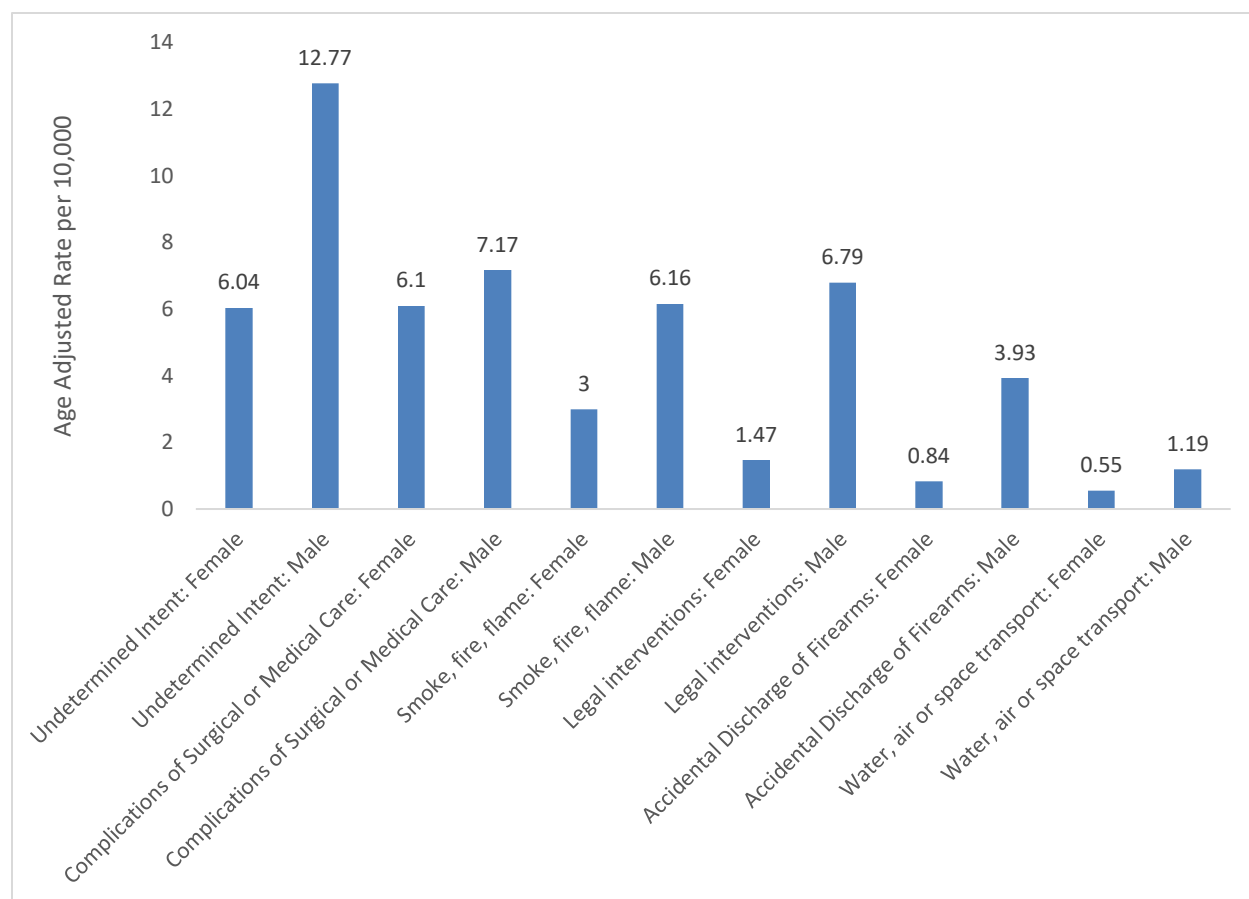


Chart 50 External Cause of Injury Hospitalizations, by Gender

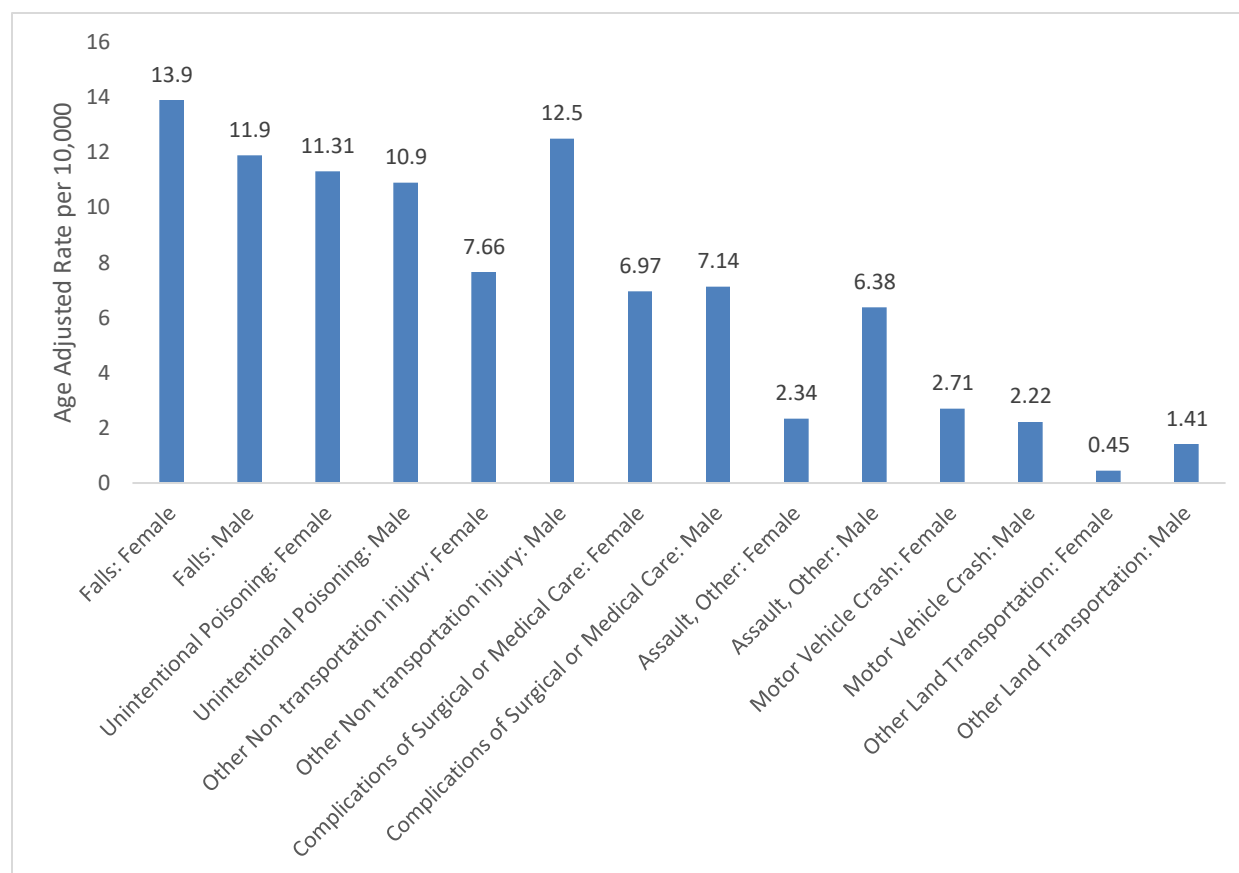


Table 38 External Cause of Injury ER Visits, Both Genders

Health Condition	Count	Age Adjusted Rate	Movement
Motor Vehicle Crash	1,651	85.26 (81.04, 89.48)	↔
Other Land Transportation	684	32.65 (30.14, 35.16)	↔
Water, Air and Space and other transportation	15	0.86 (0.42, 1.30)	↔
Falls	6,294	330.23 (321.87, 338.59)	↑
Accidental Discharge of Firearm	46	2.34 (1.54, 3.03)	↔
Drowning	0	0	
Accidental exposure to smoke, fire, flame	88	4.52 (3.55, 5.49)	↔
Unintentional Poisoning	1,274	64.19 (60.58, 67.79)	
Other and unspecified non-transportation accidents	10,255	516.88 (506.62, 527.14)	↑
Suicide by discharge of firearm	NA	NA	
Suicide by other means	203	10.14 (8.71, 11.57)	↔
Assault by firearm	20	1.11 (0.61, 1.60)	↔
Assault by other means	3,502	188.84 (182.43, 195.26)	↓
Legal Intervention	73	4.05 (3.10, 5.00)	↔
Discharge of firearm, undetermined intent	5	0.28 (0.03, 0.54)	NA
Other and unspecified events of undetermined intent	181	9.32 (7.92, 10.71)	↔
Operations of war and their sequelae	0	0	
Complications of medical and surgical care	117	6.64 (5.42, 7.87)	↓

Table 38a External Cause of Injury ER Visits, by Gender

Health Condition	Female Count	Female Rate	Male Count	Male Rate
Motor Vehicle Crash	831	83.68 (77.83, 89.53)	820	86.72 (80.64, 92.80)
Other Land Transportation	208	18.95 (16.31, 21.60)	476	47.56 (43.19, 51.93)
Water, Air and Space and other transportation	5	0.55 (0.06, 1.04)	10	1.19 (0.44, 1.94)
Falls	3,268	338.26 (326.32, 350.20)	3,026	322.51 (310.78, 334.24)
Accidental Discharge of Firearm	8	0.84 (0.24, 1.44)	38	3.93 (2.65, 5.21)
Drowning	0		0	
Accidental exposure to smoke, fire, flame	30	3.00 (1.90, 4.10)	58	6.16 (3.55, 7.78)
Unintentional Poisoning	741	72.84 (67.44, 78.23)	553	57.89 (52.96, 62.82)
Other and unspecified non-transportation accidents	4,631	449.48 (436.15, 462.81)	5,624	589.28 (573.53, 605.03)
Suicide by discharge of firearm	NA		NA	
Suicide by other means	84	7.97 (6.21, 9.73)	119	12.42 (10.14, 14.71)
Assault by firearm	NA	NA	19	2.14 (1.15, 3.13)
Assault by other means	1,320	138.38 (130.71, 146.06)	2,182	243.12 (232.69, 253.56)
Legal Intervention	14	1.47 (0.68, 2.26)	59	6.79 (5.02, 8.56)
Discharge of firearm, undetermined intent	NA		NA	
Other and unspecified events of undetermined intent	63	6.04 (4.52, 7.57)	118	12.77 (10.40, 15.14)
Operations of war and their sequelae	0		0	
Complications of medical and surgical care	57	6.10 (4.48, 7.71)	60	7.17 (5.33, 9.01)

Table 39 External Cause of Injury Hospitalizations, Both Genders

Health Condition	Count	Age Adjusted Rate	Movement
Motor Vehicle Crash	46	2.47 (1.73, 3.20)	↔
Other Land Transportation	18	0.92 (0.48, 1.35)	↔
Water, Air and Space and other transportation	NA	NA	
Falls	212	12.78 (11.04, 14.53)	↑
Accidental Discharge of Firearm	NA	NA	
Drowning	0	0	
Accidental exposure to smoke, fire, flame	7	0.43 (0.11, 0.75)	NA
Unintentional Poisoning	196	11.07 (9.49, 12.64)	
Other and unspecified non-transportation accidents	180	10.01 (8.51, 11.50)	↔
Suicide by discharge of firearm	0	0	
Suicide by other means	8	0.40 (0.12, 0.68)	↔
Assault by firearm	NA	NA	
Assault by other means	78	4.29 (3.32, 5.27)	↔
Legal Intervention	0	0	
Discharge of firearm, undetermined intent	0	0	
Other and unspecified events of undetermined intent	NA	NA	
Operations of war and their sequelae	0	0	
Complications of medical and surgical care	124	7.04 (5.78, 8.31)	↔

Table 39a External Cause of Injury Hospitalizations, by Gender

Health Condition	Female Count	Female Rate	Male Count	Male Rate
Motor Vehicle Crash	27	2.71 (1.66, 3.76)	19	2.22 (1.21, 3.24)
Other Land Transportation	5	0.45 (0.04, 0.86)	13	1.41 (0.63, 2.19)
Water, Air and Space and other transportation	0		NA	NA
Falls	109	13.90 (11.26, 16.54)	103	11.90 (9.57, 14.23)
Accidental Discharge of Firearm	0		0	
Drowning	0		0	
Accidental exposure to smoke, fire, flame	NA	NA	6	0.80 (0.16, 1.43)
Unintentional Poisoning	101	11.31 (9.05, 13.56)	95	10.90 (8.67, 13.12)
Other and unspecified non-transportation accidents	70	7.66 (5.81, 9.51)	110	12.50 (10.13, 14.87)
Suicide by discharge of firearm	NA		0	
Suicide by other means	5	0.48 (0.05, 0.90)	NA	
Assault by firearm	0		NA	
Assault by other means	22	2.34 (1.33, 3.35)	56	6.38 (4.68, 8.09)
Legal Intervention	0		0	
Discharge of firearm, undetermined intent	0		0	
Other and unspecified events of undetermined intent	NA		0	
Operations of war and their sequelae	0		0	
Complications of medical and surgical care	62	6.97 (5.20, 8.74)	62	7.14 (5.34, 8.94)

T Codes Injury, Poisoning, and Certain Other Consequences of of External Causes

Chart 51 ER Visits Both Genders

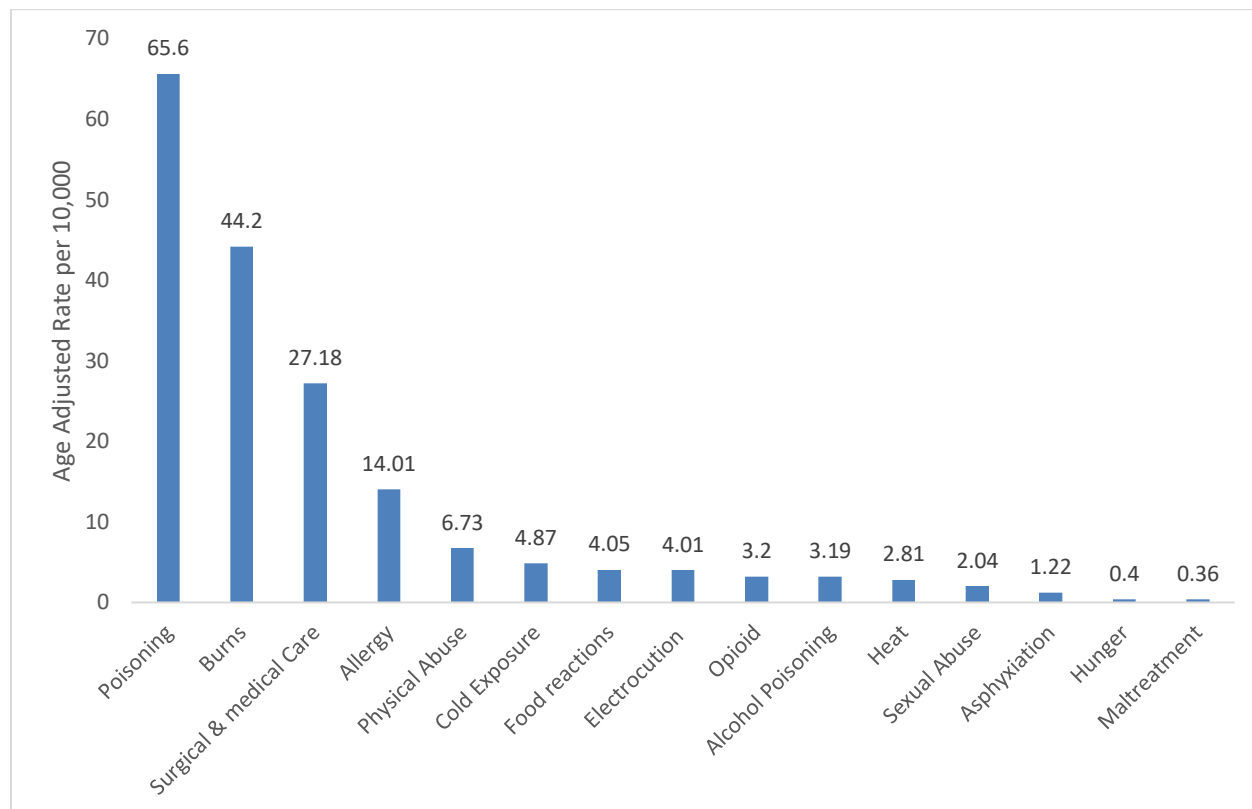


Chart 52 Hospitalizations, Both Genders

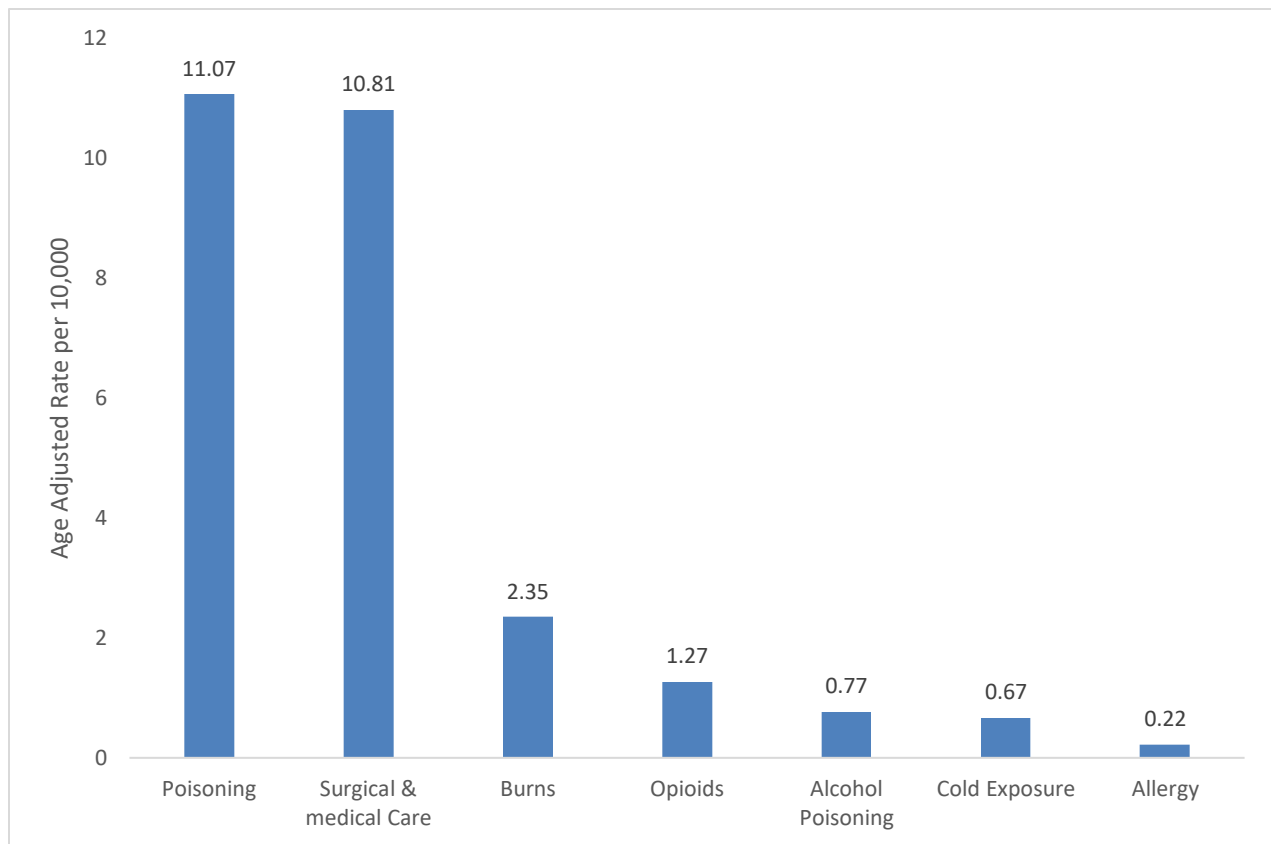


Table 40 All Visits, Both Genders

Health Condition	Count	Age Adjusted Rate
Alcohol Poisoning	90	5.04 (3.98, 6.10)
Allergy	974	50.91 (47.64, 54.18)
Asphyxiation	38	1.84 (1.24, 2.45)
Burns	2,534	129.45 (124.29, 134.62)
Cold Exposure	130	7.11 (5.86, 8.35)
Drowning	NA	NA
Electrocution	94	4.44 (3.52, 5.36)
Food Reactions	230	11.53 (10.00, 13.05)
Frostbite	12	0.62 (0.26, 0.98)
Heat	86	4.46 (3.50, 5.43)
Hunger	18	0.96 (0.51, 1.41)
Maltreatment	134	6.33 (5.23, 7.42)
Motion Sickness	10	0.46 (0.17, 0.75)
Opioids	120	6.63 (5.42, 7.85)
Overexertion	5	0.27 (0.03, 0.52)
Physical Abuse	417	22.19 (20.00, 24.37)
Radiation	5	0.29 (0.03, 0.55)
Sexual Abuse	125	5.99 (4.91, 7.07)
Surgical & Medical Care	2,726	151.08 (145.31, 156.86)

Table 41 ER Visits, Both Genders

Health Condition	Count	Age Adjusted Rate
Alcohol Poisoning	59	3.19 (2.36, 4.02)
Allergy	278	14.01 (12.32, 15.71)
Asphyxiation	25	1.22 (0.73, 1.71)
Burns	881	44.20 (41.20, 47.19)
Cold Exposure	88	4.87 (3.83, 5.91)
Drowning	NA	NA
Electrocution	86	4.01 (3.14, 4.88)
Food Reactions	80	4.05 (3.14, 4.95)
Frostbite	NA	NA
Heat	54	2.81 (2.04, 3.58)
Hunger	7	0.40 (0.10, 0.71)
Maltreatment	7	0.36 (0.09, 0.64)
Motion Sickness	0	
Opioids	58	3.20 (2.36, 4.04)
Overexertion	NA	NA
Physical Abuse	127	6.73 (5.53, 7.93)
Radiation	NA	NA
Sexual Abuse	42	2.04 (1.41, 2.68)
Surgical & Medical Care	480	27.18 (24.70, 29.65)

Table 42 Hospitalization, Both Genders

Health Condition	Count	Age Adjusted Rate
Alcohol Poisoning	13	0.77 (0.34, 1.19)
Allergy	NA	NA
Asphyxiation	0	
Burns	42	2.35 (1.62, 3.08)
Cold Exposure	12	0.67 (0.28, 1.05)
Drowning	0	
Electrocution	0	
Food Reactions	0	
Frostbite	NA	NA
Heat	NA	NA
Hunger	NA	NA
Maltreatment	NA	NA
Motion Sickness	0	
Opioids	21	1.27 (0.72, 1.82)
Overexertion	0	
Physical Abuse	NA	NA
Radiation	0	
Sexual Abuse	NA	NA
Surgical & Medical Care	186	10.81 (9.23, 12.39)

Navajo Special Infectious Diseases

Chart 53 Navajo Special Infectious Diseases ER Visits & Hospitalizations, Both Genders

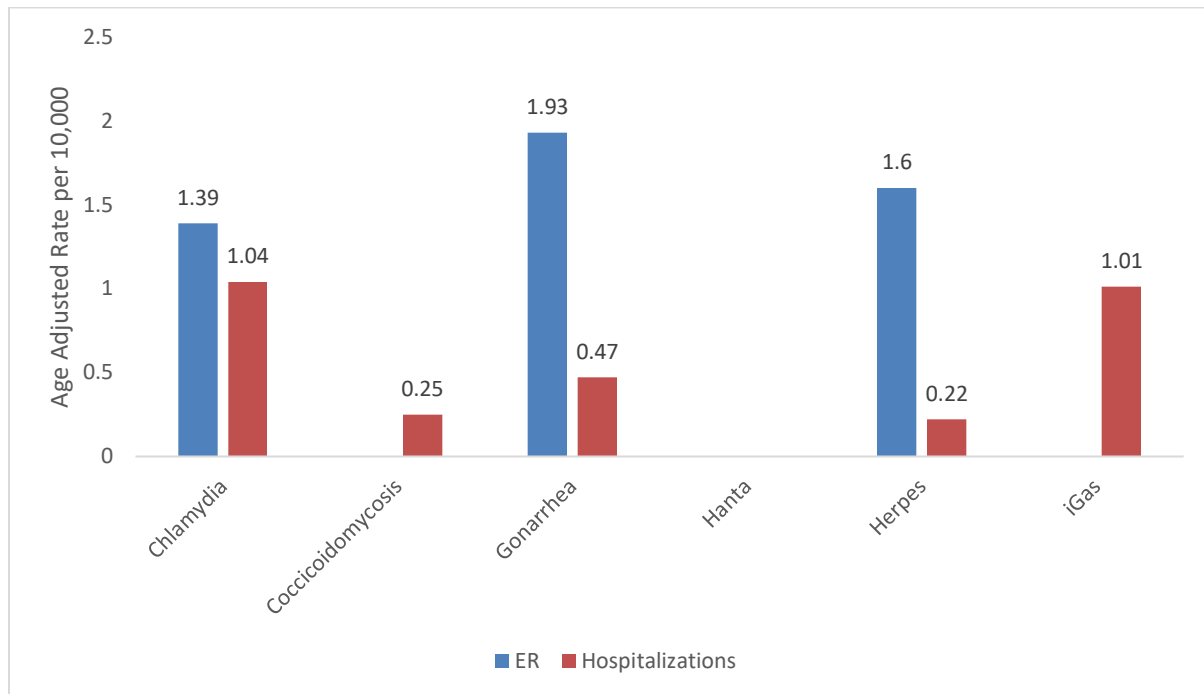


Table 43 Navajo Special Infectious Diseases, All Health Care Visits Both Genders

Health Condition	Count	Age Adjusted Rate	Movement
Plague	NA	NA	
Tularemia	NA	NA	
Group A Streptococcus	20	1.21 (0.67, 1.75)	↔
Gonococcal Infections	465	24.67 (22.36, 26.97)	↑
Chlamydia	755	37.19 (34.46, 39.92)	↔
Genital Herpes	341	18.12 (16.16, 20.08)	↔
Rocky Mountain Spotted Fever	5	0.23 (0.03, 0.44)	↔
West Nile Virus	0		
Hanta Virus	7	0.41 (0.10, 0.72)	↔
Coccidioidomycosis	97	5.17 (4.12, 6.21)	↔

Table 44 Navajo Special Infectious Diseases ER Visits, Both Genders

Health Condition	Count	Age Adjusted Rate	
Plague	0		
Tularemia	0		
Group A Streptococcus	0		
Gonococcal Infections	38	1.93 (1.30, 2.57)	↔
Chlamydia	29	1.39 (0.87, 1.91)	↔
Genital Herpes	32	1.60 (1.04, 2.17)	↔
Rocky Mountain Spotted Fever	NA		
West Nile Virus	0		
Hanta Virus	0		
Coccidioidomycosis	NA		

Table 45 Navajo Special Infectious Diseases Hospitalizations, Both Genders

Health Condition	Count	Age Adjusted Rate	Movement
Plague	NA	NA	NA
Tularemia	0		
Group A Streptococcus	13	0.73 (0.32, 1.13)	↔
Gonococcal Infections	8	0.47 (0.14, 0.80)	NA
Chlamydia	21	1.04 (0.58, 1.50)	↔
Genital Herpes	NA	NA	NA
Rocky Mountain Spotted Fever	NA	NA	NA
West Nile Virus	0		
Hanta Virus	NA	NA	NA
Coccidioidomycosis	9	0.25 (0.03, 0.48)	↔

Appendix

NCHS 113 ICD-10 Definitions

Infectious Diseases	
Health Condition	ICD-10 Codes
Salmonella	A01-A02
Shigellosis and amebiasis	A03, A06
Certain other intestinal infections	A04, A07-A09
Respiratory tuberculosis	A16
Other tuberculosis	A17-A19
Pertussis (Whooping Cough)	A37
Scarlet fever and erysipelas	A38, A46
Meningococcal infection	A39
Septicemia	A40-A41
Syphilis	A50-A53
Acute Poliomyelitis	A80
Arthropod-borne viral encephalitis	A83-A84, A85.2
Measles	B05
Viral Hepatitis	B15-B19
Human immunodeficiency virus (HIV) disease	B20-B24
Malaria	B50-B54
Other and unspecified infectious and parasitic diseases and their sequelae	A00, A05, A20-A36, A42-A44, A48-A49, A54-A79, A81-A82, A85.0-A85.1, A85.8, A86-B04, B06-B09, B25-B49, B55-B99
Malignant Neoplasms	
Malignant neoplasms of lip, oral cavity and pharynx	C00-C14
Malignant neoplasms of esophagus	C15
Malignant neoplasms of stomach	C16
Malignant neoplasms of colon, rectum and anus	C18-C21
Malignant neoplasms of liver and intrahepatic bile ducts	C22
Malignant neoplasm of pancreas	C25
Malignant neoplasm of larynx	C32
Malignant neoplasms of trachea, bronchus and lung	C33-C34
Malignant melanoma of skin	C43
Malignant neoplasm of breast	C50
Malignant neoplasm of cervix uteri	C53
Malignant neoplasms of corpus uteri and uterus, part unspecified	C54-C55
Malignant neoplasm of ovary	C56
Malignant neoplasm of prostate	C61
Malignant neoplasms of kidney and renal pelvis	C64-C65
Malignant neoplasm of bladder	C67
Malignant neoplasms of meninges, brain and other parts of central nervous system	C70-C72
Hodgkin's disease	C81

Non-Hodgkin's lymphoma	C82-C85
Leukemia	C91-C95
Multiple myeloma and immunoproliferative neoplasms	C88, C90
Other and unspecified malignant neoplasms of lymphoid, hematopoietic and related tissue	C96
All other and unspecified malignant neoplasms	C17, C23-C24, C26-C31, C37-C41, C44-C49, C51-C52, C57-C60, C62-C63, C66, C68-C69, C73-C80, C97
Diseases of the blood and blood forming organs and certain disorders involving the immune mechanism	
In situ neoplasms, benign neoplasms and neoplasms of uncertain or unknown behavior	D00-D48
Anemias	D50-D64
Endocrine, nutritional and metabolic diseases	
Diabetes Mellitus	E10-E14
Malnutrition	E40-E46
Other nutritional deficiencies	E50-E64
Mental and behavioral disorders	
Meningitis	G00, G03
Parkinson's disease	G20-G21
Alzheimer's disease	G30
Diseases of the circulatory system	
Acute rheumatic fever and chronic rheumatic heart diseases	I00-I09
Hypertensive heart disease	I11
Hypertensive heart and renal disease	I13
Acute myocardial infarction	I21-I22
Other acute ischemic heart diseases	I24
Atherosclerotic cardiovascular disease, so described	I25.0
All other forms of chronic ischemic heart disease	I20, I25.1-I25.9
Acute and subacute endocarditis	I33
Acute and subacute endocarditis	I30-I31, I40
Heart failure	I50
All other forms of heart disease	I26-I28, I34-I38, I42-I49, I51
Essential (primary) hypertension and hypertensive renal disease	I10, I12
Cerebrovascular diseases	I60-I69
Atherosclerosis	I70
Aortic aneurysm and dissection	I71
Other diseases of arteries, arterioles and capillaries	I72-I78
Other disorders of circulatory system	I80-I99
Diseases of the respiratory system	
Influenza	J09-J11
Pneumonia	J12-J18
Acute bronchitis and bronchiolitis	J20-J21

Unspecified acute lower respiratory infection	J22
Bronchitis, chronic and unspecified	J40-J42
Emphysema	J43
Asthma	J45-J46
Other chronic lower respiratory diseases	J44, J47
Pneumoconiosis and chemical effects	J60-J66, J68
Pneumonitis due to solids and liquids	J69
Other diseases of respiratory system	J00-J06, J30-J39, J67, J70-J98
Diseases of the digestive system	
Peptic ulcer	K25-K28
Diseases of appendix	K35-K38
Hernia	K40-K46
Alcoholic liver disease	K70
Other chronic liver disease and cirrhosis	K73-K74
Cholelithiasis and other disorders of gallbladder	K80-K82
Diseases of the genitourinary system	
Cholelithiasis and other disorders of gallbladder	N00-N01, N04
Chronic glomerulonephritis, nephritis and nephritis not specified as acute or chronic, and renal sclerosis unspecified	N02-N03, N05-N07, N26
Renal Failure	N17-N19
Other disorders of kidney	N25, N27
Infections of kidney	N10-N12, N13.6, N15.1
Hyperplasia of prostate	N40
Inflammatory diseases of female pelvic organs	N70-N76
Pregnancy, childbirth and the puerperium	
Pregnancy with abortive outcome	O00-O07
Other complications of pregnancy, childbirth and the puerperium	O10-O99
Certain conditions originating in the perinatal period	
Certain conditions originating in the perinatal period	P00-P96
Congenital malformations, deformations and chromosomal abnormalities	
Congenital malformations, deformations and chromosomal abnormalities	Q00-Q99
Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified	
Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified	R00-R99
All other diseases (Residual)	
All other diseases (Residual)	All Codes not specified for the other health conditions
External causes of morbidity and mortality	
Motor Vehicle Crash	V02-V04, V09.0, V09.2, V12-V14, V19.0-V19.2, V19.4-V19.6, V20-V79, V80.3-V80.5, V81.0-

	V81.1, V82.0-V82.1, V83-V86, V87.0-V87.8, V88.0-V88.8, V89.0, V89.2
Unintentional injury: Other land transport	V01, V05-V06, V09.1, V09.3-V09.9, V10-V11, V15-V18, V19.3, V19.8-V19.9, V80.0-V80.2, V80.6-V80.9, V81.2-V81.9, V82.2-V82.9, V87.9, V88.9, V89.1, V89.3, V89.9
Unintentional injury: Water, air and space, and other transport	V90-V99, Y85
Falls	W00-W19
Accidental discharge of firearms	W32-W34
Accidental drowning and submersion	W65-W74
Accidental exposure to smoke, fire and flames	X00-X09
Accidental poisoning and exposure to noxious substances	X40-X49
Other and unspecified non-transport accidents and their sequelae	W20-W31, W35-W64, W75-W99, X10-X39, X50-X59, Y86
Intentional self-harm (suicide) by discharge of firearms	X72-X74
Intentional self-harm (suicide) by other and unspecified means and their sequelae	X60-X71, X75-X84, Y87.0
Assault (homicide) by discharge of firearms	X93-X95
Assault (homicide) by other and unspecified means and their sequelae	X85-X92, X96-Y09, Y87.1
Legal intervention	Y35, Y89.0
Discharge of firearms, undetermined intent	Y22-Y24
Other and unspecified events of undetermined intent and their sequelae	Y10-Y21, Y25-Y34, Y87.2, Y89.9
Operations of war and their sequelae	Y36, Y89.1
Complications of medical and surgical care	Y40-Y84, Y88

Navajo Special Health Conditions

Infectious Diseases	
Health Condition	ICD-10 Code
Plague	A20
Tularemia	A21
Group A Streptococcus	
Gonococcal Infections	A54
Chlamydia	A55-A56
Genital Herpes	A60
Rocky Mountain Spotted Fever	A77
West Nile Virus	A92.3
Hanta Virus	B33.4
Coccidioidomycosis	B38
Mental and behavioral disorders	
Dementia	F01-F03

Leading Causes of “Other Infection” Hospitalization

Code	Count	Description	Cumulative Percent of total
B96.20	362	Unspecified E. coli	20.4%
B95.61	153	Methicillin susceptible Staphylococcus aureus infection as the cause of diseases classified elsewhere	29.0%
B96.89	129	Other specified bacterial agents as the cause of diseases classified elsewhere	36.3%
B96.1	115	Klebsiella pneumoniae [K. pneumoniae] as the cause of diseases classified elsewhere	42.8%
B95.1	106	Streptococcus, group B, as the cause of diseases classified elsewhere	48.7%
B95.62	77	Methicillin resistant Staphylococcus aureus infection as the cause of diseases classified elsewhere	53.1%
B95.0	69	Streptococcus, group A, as the cause of diseases classified elsewhere	57.0%
B95.2	66	Enterococcus as the cause of diseases classified elsewhere	60.7%
B95.4	56	Other streptococcus as the cause of diseases classified elsewhere	63.8%
B95.7	51	Other staphylococcus as the cause of diseases classified elsewhere	66.7%
B35.3	44	Tinea pedis (athlete's foot)	69.2%
B96.29	42	Other Escherichia coli [E. coli] as the cause of diseases classified elsewhere	71.5%
B35.1	39	Tinea unguium (Nail fungus)	73.7%
B96.5	38	Pseudomonas (aeruginosa) (mallei) (pseudomallei) as the cause of diseases classified elsewhere	75.9%
B34.9	32	Viral infection, unspecified	77.7%
B96.4	31	Proteus (mirabilis) (morganii) as the cause of diseases classified elsewhere	79.4%
B37.0	24	Candidal stomatitis (Oral thrush)	80.8%
B95.5	24	Unspecified streptococcus as the cause of diseases classified elsewhere	82.1%
B95.8	22	Unspecified staphylococcus as the cause of diseases classified elsewhere	83.4%
B96.81	19	Helicobacter pylori	84.5%

Leading Cause of Other Respiratory Disease Emergency Room Visits

Code	Count	Description	Percent of Total
J02.0-J02.9	5556	Acute pharyngitis	32.3%
J06-J06.9	4361	Acute upper respiratory infections of multiple and unspecified sites	57.7%
J00	1,754	Acute nasopharyngitis	67.9%
J01.00-J01.91	1331	Acute sinusitis	75.7%
J32.0-J32.9	971	Chronic sinusitis	81.3%

J30.0-J30.9	949	Vasomotor and allergic rhinitis	86.8%
J03.00-J03.91	533	Acute tonsillitis	89.9%
J05.0-05.10	226	Croup and epiglottitis	91.3%
J31.0-J31.2	193	Chronic rhinitis, nasopharyngitis, and pharyngitis	92.4%
J04.0-J04.10	131	Acute laryngitis and tracheitis	93.1%

Leading Other Non Transportation Injury Emergency Room Visits

Code	Count	Injury Type	Percent of Total
X58.XXXA-X58.XXXS	1,750	Exposure to other specified factors	17.1%
W22.8XXA-W22.8XXS	1,089	Striking against or struck by other objects	27.7%
X50.0XXA-X50.0XXD	774	Overexertion from strenuous movement or load	35.2%
W54.0XXA-W54.0XXS	566	Bitten by dog	40.8%
X50.1XXA-X50.1XXD	507	Overexertion from prolonged static or awkward postures	45.7%
W45.8XXA-W45.8XXS	491	Other foreign body or object entering through skin	50.5%
W20.8XXA-W20.8XXS	481	Other cause of strike by thrown, projected or falling object	55.2%
W57.XXXA-W57.XXXS	464	Bitten or stung by nonvenomous insect and other nonvenomous arthropods	59.7%
W23.0XXA-W23.0XXS	352	Caught, crushed, jammed, or pinched between moving objects	63.1%
W26.0XXA-W26.0XXS	318	Contact with knife	66.2%
W22.09XA-W22.09XS	232	Striking against other stationary object	68.5%
W26.8XXA	215	Contact with other sharp object(s), not elsewhere classified	70.6%
W50.0XXA-W50.0XXD	214	Accidental hit or strike by another person	72.7%
X50.9XXA-X50.9XXD	196	Other and unspecified overexertion or strenuous movements or postures	74.6%
W25.XXXA-W25.XXXD	194	Contact with sharp glass	76.5%
X50.3XXA-X50.3XXD	176	Overexertion from repetitive movements	78.2%
W45.0XXA-W45.0XXD	158	Nail entering through the skin	79.7%

Leading Other Infections Emergency Room Visits

Code	Count	Description	Percent of Total
B96.20	362	Unspecified E. coli	20.4%
B95.61	153	Methicillin susceptible Staphylococcus aureus infection as the cause of diseases classified elsewhere	29.0%
B96.89	129	Other specified bacterial agents as the cause of diseases classified elsewhere	36.3%
B96.1	115	Klebsiella pneumoniae [K. pneumoniae] as the cause of diseases classified elsewhere	42.8%
B95.1	106	Streptococcus, group B, as the cause of diseases classified elsewhere	48.7%
B95.62	77	Methicillin resistant Staphylococcus aureus infection as the cause of diseases classified elsewhere	53.1%
B95.0	69	Streptococcus, group A, as the cause of diseases classified elsewhere	57.0%
B95.2	66	Enterococcus as the cause of diseases classified elsewhere	60.7%
B95.4	56	Other streptococcus as the cause of diseases classified elsewhere	63.8%
B95.7	51	Other staphylococcus as the cause of diseases classified elsewhere	66.7%
B35.3	44	Tinea pedis (athlete's foot)	69.2%
B96.29	42	Other Escherichia coli [E. coli] as the cause of diseases classified elsewhere	71.5%
B35.1	39	Tinea unguium (Nail fungus)	73.7%
B96.5	38	Pseudomonas (aeruginosa) (mallei) (pseudomallei) as the cause of diseases classified elsewhere	75.9%
B34.9	32	Viral infection, unspecified	77.7%
B96.4	31	Proteus (mirabilis) (morganii) as the cause of diseases classified elsewhere	79.4%
B37.0	24	Candidal stomatitis (Oral thrush)	80.8%
B95.5	24	Unspecified streptococcus as the cause of diseases classified elsewhere	82.1%
B95.8	22	Unspecified staphylococcus as the cause of diseases classified elsewhere	83.4%
B96.81	19	Helicobacter pylori	84.5%